

tagcatatatt gatattccaat attcttgttt atgttcgttg aatgccttga accagatgtg. 120  
 tcgaacctac agcgtgtctg tgccggctgg cgatgacttt gaatttccaa actctccttg 180  
 cttaagtac tgggatctcg ttcattttgt ttcccatagc aacgaacctg tatttcgtgt 240  
 atttcacaag tgcattcatgt gctgcttttt agaacaaaga atagttgtct ttcgggatgg 300  
 cctttgtata ctgaaaaatt ccaacagctg gttgttggtg gatgctttgc gtgatattcac 360  
 anaacatgaa aaaggacaaa gaa 383

<210> 1165  
 <211> 432  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-022-Q1-E1-B6  
 <400> 1165

ggcatttgct tgaaacttta caaagaaaca acttatgagc gacagtgtt ccattggaga 60  
 aacaaagagt gtagccactt tgttttcatt gggttttaaa actgttcgaa ggcctcgcgc 120  
 gagagatagt gacgattgca cgctttcgga aggagagcaa ccgaaaaaga ggaaatgcgt 180  
 cgagttgtcg agctattcaa gtgatcttgg tctcaatcat aagaaactgg ataaagcgaa 240  
 caacttcac aagctaaggc aatctatgga tcgtttctcg ttttccgacg aaaaccaga 300  
 ggaagcgatg gaagtccgg cgtctctga tagaacgccg gaaaggcaaa ttgtttccaa 360  
 cagagttgaa aaaacagttc ctctacccc tagaaagaag tttcatagtg ggttgccctac 420  
 agtgttgaaa ga 432

<210> 1166  
 <211> 427  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-022-Q1-E1-B7  
 <400> 1166

aaaagatgga cgccgctgtg gagtttttac gaaactgtaa acaacatatt gacaaagcct 60  
 tggaccgtcc ctatctaact tccgactatt taaaagactt tggtcgttct attcattgga 120  
 cagaaccctt catattgggg ttaatatgtg ctacttgat tctggctttt attacagtga 180

aaactagaaa caagaccaac ttgcaaactc catctttttc acttcagtta ttactgtatt 240  
 caatgtgaag aacttgaaca agttagtgtc tgagaattgg aaacaaatag ctagcaaaaa 300  
 ctatttcgac gagaacggtt tctttatatt tgtatttgta gctttaccct tgttggtta 360  
 tggaaacttt attatgttgc acaatgggta tttggcttta caaactatca atgaaattag 420  
 acgagag . 427

<210> 1167  
 <211> 435  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-022-Q1-E1-B8  
 <400> 1167

tgatgaaacg agacaagatc aagtcttggt atctttccca gtcttatcca gtggcggtac 60  
 aaaatagaat caccgaatgt cttgctttat taaaaaatca acccaacaat attccttgct 120  
 atatccaaca atatggaata cccgaagttg ctggtttgcg tgctttgata tggaactggt 180  
 gcattgaaaa attctttgcg gtcgattcta ctacctcttt gcacgttgct tgttcacgt 240  
 attgggaatc gatcgcaaca taccagcaac atccaaccga cgacccacta ctggatagta 300  
 gtaccaccga gactgtcgtg gaccatcttc tcaaccacg tgccaacagt gcgtggcaac 360  
 aatacttttc caaacaacga ttganaaaga ccattcatat ggatacagtt cgaacgcac 420  
 ccgactggca tctct 435

<210> 1168  
 <211> 421  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-022-Q1-E1-B9  
 <400> 1168

caacatgagg aatagcgcta tggatttctt tgtatttagc attatttttg caaatgttgt 60  
 tcttactatt caagcagcaa cagttttgga gactttggac tcaactgaact atacagagta 120  
 tcttgacatg gtaaaggctg caggcctgaa ctcgaggttt aacgactctg ctgcgacatg 180  
 gactgtgttt gcagcagaca gtacaggagt caatgccagc ttgggagcaa tgcacttggt 240

tatttcgaat atcgcatctg atgcgacgga gatcagagaa attgctgaat cttatgtcaa 300  
 ccgtagaatt aagtctgatg agatttagcc aggaccaacg atccttacag ctttgtacgg 360  
 aatgactttc actgttgtta aaaattcgac aggtttattt gtggatggca ttacggtgat 420  
 t 421

<210> 1169  
 <211> 198  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-022-Q1-E1-C1  
 <400> 1169

gcttttttga caaggtcaga cctcaatcaa gtcagaaagg aacgttggtc aaacatgggtg 60  
 tgggcacgcy gaatatctgc gacaactgaa gagtatctca gtaagtctac agacaagaac 120  
 attgttgcyga ataggatggg ttcattctgtc aaatcatcat cttccggtgt cacaatgcga 180  
 ccaggttact ttgaatgg 198

<210> 1170  
 <211> 275  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-022-Q1-E1-C10  
 <400> 1170

tgtttttttag ttttcctgga gatagttgtc attttatagc cttaggtagt ttcagagata 60  
 gtagcggcaa cgtttattta tgtctgtggt ctccgcaggg cttataggat aattctcaga 120  
 ggtgaaaaga aattgcgcaa ctacttgctt ttgcagacca aaagtggcgc atactactcc 180  
 cttcagcgac gattcttgcy cagagttttc aagggcattc acaatgcca tcaatataca 240  
 caaaactgtg aaacgggata gagccgttac tagta 275

<210> 1171  
 <211> 429  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-022-Q1-E1-C11

<400> 1171

gttgggcaat tcattcttta ttggtgctgc catgtcttat ctcttacctc gtaagtattt 60

tccatggata aatatatggt tattgaacgt tatagttaga ccttcactca ggttatgcag 120

ttgaccaagc tattttaagt gaggaagata gagtcgtggt catacgcttt ggtcaggact 180

ttgacccgac gtgtatggtg atggacgaaa cactttacaa ggcagcagaa aagataaaaa 240

atattgctgt cgtctatttg gtcgatatac gggaagtacc tgactttaac gctatgtacg 300

aattgtatga cccttgtacc gttatgtcct tctttcggaa taaacatatt atggtagact 360

tgggtaccgg aaataacaac aagattaact gggctatgca agacgttcag gaatttattg 420

atattgtag 429

<210> 1172

<211> 406

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-022-Q1-E1-C12

<400> 1172

cccacgcgtc cggtcgaaga aggaatttac atttggggta tcataacata ttatatgttt 60

tgggggttctg gtatgggacc ttatgcttgg gtactgggat cggaaatata tccaacttat 120

attcgaagtg aaggaatggc gctagttact tgggtggacat acattggaaa ctttattacg 180

acttattgct tttccaagat gaaaagagca atgactgctc caggaatttt cattgggttt 240

tatggaggtt ttgttactat tgcttgggtc tatgccatgt ttatgatgcc tgaaacaaaa 300

gataagactt tggaagagat tgatgctttg ttttccatgt cgatgcctga tttagcgaaa 360

cataattggg ataatgtgaa gaagacagtg gatgatctct tgcatt 406

<210> 1173

<211> 391

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-022-Q1-E1-C2

<400> 1173

cccacgcgtc cgccccacgcg tccgattctc gccgatgtca tcttttcata aaagaaatct 60



tttagcttat gctcattatg cttccgatca cacaactgga aaaggaaagg gagcaataac 120  
ctttcaattt gagccacaca agcccgcttt cgacttggaa tttacgtatg gtccgacaaa 180  
ggctacaaga acttacgctt cttatagtgc agaacagtct cgtgtaaagc atattggtat 240  
agagcatagt tttacgtgct ttggaaagcg acagttattg gatgggactt ggttaccttc 300  
gcgagatagc tgcaacctaa agtatagctt gaatgtagac aagagacatc aactcacaag 360  
ttattttggg tttcgaaaga tatcaaaaag a 391

<210> 1174  
<211> 315  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-022-Q1-E1-C3

<400> 1174  
gatgatttta tgtccttgtg gtagtactaa tgtctatgct tggctaattg tcgccagtaa 60  
cttgtcttcg tcgttcttct tattagtatg agtgaaaagg tggagaatgg tactaataac 120  
gagttgttag aaaaaccgaa ggttgtgata tttggtgctg gaggcctacg tggttatttg 180  
gctgccagac ttgcacagtg tggacgtagc tttgttcacg tcatcgccag aggttctcac 240  
ttgaaagcta ttcaggaaaa taacaattgc atcgttttta aaagtatcca tggtgactgc 300  
acttcccaat tggat 315

<210> 1175  
<211> 430  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-022-Q1-E1-C6

<400> 1175  
cggaacgcgt gggcggtaga gctgcttggc aaaatttagg ccagagcgcc gtcgcccgca 60  
ccaatccac ttgtctattg aagcacactc aaggagcgaa taaagagact actgaaaaaa 120  
aatcatgca aaaaaatcaa cccgttcacg caacatagct gttttgatgt agttgcagtt 180  
gccattggt atagaacgag cagagttgga gtttgagatg aagtagtcgt tgctcaagcg 240  
aaacatagtt gactggcatc gagatgacgc actagtgata gtttcttcca atcgcaggtg 300

gaataggttt tccttgtaga ggctgacttg tggactgcga gattagtgtg gataaagctc 360  
 ataggaagaa aattccacgt gcttcaagtt ttcgtcttga actggtgaaa aataagggtt 420  
 acttggtgaa 430

<210> 1176  
 <211> 429  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-022-Q1-E1-C7  
 <400> 1176

cccacgcgtc cgcccacgcg tccgtatcga cggaacgctg aaagcttcgc agcaaattatt 60  
 cgaagagata aaaagaagga agatgaaatg cagtttagca gtaataccaa aaacgataga 120  
 taatgacata atgcgaattc agcgatcctt tggtttcgag acttccattg aagcagcagc 180  
 acagtcctta cgtagtatac attgtgaggc ttcattgttct taccatgcgg tggcagtgat 240  
 acaagtacct ggaagaaata gcggtctttt tgcggtggag acagctttgg cttctcgttt 300  
 agtcgatgct tgtcttattc cagaatttcc tttcaagttg aactcgttgt tgaatcatat 360  
 ttatgaacgg gtacgagtga aaggatttgc catgattctg gtttccgatg gagcagggtca 420  
 tgaatatgt 429

<210> 1177  
 <211> 341  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-022-Q1-E1-C9  
 <400> 1177

gagatgatgg gagtaataag ggaaggagga gtacactcga taatagggat gggaatgatg 60  
 atgttattag gaagagaaag gagtaaggaa gtaaaggaga tgataaatgt gagtgtaagt 120  
 gagagtggag tatggagtgg agagaagagg aagaggagtg taatgaagga ggagataaag 180  
 ggagagaagg agataaggga gtggagtggag ataaggatgg aggaggagat ggtaatgata 240  
 atagcatgta tggtagtcca ttggagcaat ttgaactggt atcgctgtat aacatggaga 300  
 tacaaggaag ggaaatacgg acaagttaca tacgagacga a 341

<210> 1178  
 <211> 430  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-022-Q1-E1-D10  
 <400> 1178

cccacgcgtc cggaatccg ttgattgggt gtgatggctc ttgtcagaag acatttcact 60  
 gtgaatgtgc tcctggagat gaaagcgagc gaccaccgat agaatcaatt gagctttatg 120  
 cttctgacga gagacctctt tggcagtgtc atagttgcac tagtggtgaa gatatttggt 180  
 tctcatgtgg gcgactaaga cacattgctg atgcgaatga tgctctaagg aaatgtagtt 240  
 taggaagttg tggacgtttc tatcacattt cttgtgcaca acaggaacca cttgctagac 300  
 tagcatcaga tggaacttgg tttaggtgtc cacaacatta ctgtgttggt tgtgaagaat 360  
 cgggtgatcc tcgtcctatg atcaagtgca tttattgtcc aagagcttgg catgtccaat 420  
 gttcacatgg 430

<210> 1179  
 <211> 336  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-022-Q1-E1-D11  
 <400> 1179

cccacgcgtc cgcacgcgcg tccgagctac cgcagtttca cctcgtccgc ctccctgcta 60  
 ggcaaagaga caagaagagc attgagttac ttgcaacaag agttgagaga agaaaaacta 120  
 tcaggatgga gagtggcaaa agaaacactt cgacttttgc gtattgttat atcttcagtg 180  
 tcttcaagtg gtttagataa gggtgaagag gctgtcaggg agttgggaca ggaactgaca 240  
 agaggttacc cacgttggtt tggtgctgag aatatgacga gaagagtact gaaagtaata 300  
 cacgaagaga caagttcaga tacttcagat cctgga 336

<210> 1180  
 <211> 433  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-022-Q1-E1-D12

<400> 1180

cacgcgtgca atccccgttct ctttcttagga cagctcttct agcaacaaag taaacatttg 60  
caactctctg tgggaagtgc aacctgtatg cggtgacctg tgcacgata agaataatga 120  
gggtgtgaaa aactactctt ttcggagtca atcagttgca tatgtcacgt gacatagtaa 180  
agttttgatg tgcacgcgaa tgaagacagg ttctagttgt ctacattatg tgtaccacgc 240  
tctgtaccaa agcataggca gtattagagc cgagagttct tactatgcag gacaaatgat 300  
ccatttgttt gttatctatg caagtacaaa tggggcgttt ttatgcaggc gtaataagta 360  
ggcatcttca ttcatttcaa gttaaggcaa ctagcagttg ggtggtgttc cacttgcata 420  
tatectccaa ggg 433

<210> 1181

<211> 248

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-022-Q1-E1-D3

<400> 1181

cagacacttg ggggaattttg catatttggc accacaattc aacaattcgg tgtcgcgtgc 60  
tgactacgta tctggcgtaa acgagggagt caatttgcac tttggtatga aagttcttca 120  
gtgagaaacg gactcagctg gatgtgtcca tgccgattat tgctttacag attctaaagc 180  
gcatatcctt agcaaaatgt cctaactgtg gatatatgaa acataccgat gcatcggcaa 240  
tattcatg 248

<210> 1182

<211> 418

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-022-Q1-E1-D5

<400> 1182

cccagtaatg aggagtggag taaacagaaa aggaagtaaa aggagggaaat gaaggggaagt 60  
tatggcaaaa acacgtgccg gcagcagcgg taaaacgtgt gtagcaagcg tagagcagaa 120

gaactgggtg taaaggtcga gtagtagagt aagtgtaaaa gggaaaggaa aggagagaaa 180  
gaggaaaggg atgaaatgca gagatctcta gagaaaggca agaaagaaaa gaaaggaaga 240  
cacagtaaat gaggcgagaa agcataggaa gtgaaacgga ttaggaaccc gtgtagtcta 300  
tgcagtaaaa gaaagaatga gtaagaaaaa agggagtcac tccaccaggg gagtaaaggc 360  
gcaagaaaga aacccaaagc aattgacggg aatcggaana aggggtggat cacgtaaa 418

<210> 1183  
<211> 325  
<212> DNA  
<213> Cyanidium caldarium

<223> unsure at all n locations  
<223> Clone ID: LIB190-022-Q1-E1-D6

<400> 1183

cgagcgcgtg ggcgatgagg aagaagaaat cgagcgcgtg ggattgtcgt gtcctttcgt 60  
ttgtttgtgg aagcgatgac ttcgattctt cagcacttgg gaataacaag accgaaaaca 120  
cccaaaatac cgcttgcctt tcaactcagt gatggaactc cttttccagt ggcttgctcc 180  
aaattatata ctgatcgaga cgtggatata tacgcgctta cgatactacc gtttgacaac 240  
gaaagaaagg ctgtggtgag tgctggggac tctgccgctc acgtggttga cttgtcaaca 300  
acacttgtaa ctgtnagtct cccgg 325

<210> 1184  
<211> 403  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-022-Q1-E1-D7

<400> 1184

cccacgcgtc cgccacgcg tccgccacg cgtccgcca cgcgtccgga ctgcctttct 60  
tgttttgtgg tggttgtcgc tttttgtctc tcaagttttt gccgaaaatg gttcaacagt 120  
ggagagcagc aggtcgcact tatcttcgtt atgcaaatac atgtgcaaat tttgttcgca 180  
aggcactaaa ggaaccgaaa cgaactgaag cattgtcgag gaccggtttt gagatgacga 240  
gaagcgagtg gagtgaaggc aaggttgtga acagaggtaa gtccacgaac aaaactacta 300

gaacggtgat ttgatggaga caccggcaga gacccttata caagataatg aaactagtaa 360  
cgtcgccaaag aattacaagt gaatgtgttt gttgttataa acg 403

<210> 1185  
<211> 425  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-022-Q1-E1-D8  
  
<400> 1185

ggaacctttg cttctaagat taaagttgac ggtgaaaagt tacaagtaac tcgagaagtg 60  
gacagagggt tagaaactct gggtcgttct tagttaaccc tttatagta ttattatcgt 120  
tattgttggt tttaggaact aagacttcct gctgttggtta cttgtgattt gagactgaat 180  
gagcctcggt acgctacctt acccaacata atgaaagcca agaagaagcc tgtggagaag 240  
ttaggtttga aggatttgaa cttggagcct tcacatggaa tagaaactct atccgttttc 300  
gaacctccga aacgacaagg tggcaacaaa gttgaaagcg tagccgagtt gatcgacaaa 360  
ctgagaaatg aagccaaagt catctgattt tgaaaacata aagtaattac gtttatttcg 420  
tttcc 425

<210> 1186  
<211> 430  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-022-Q1-E1-D9  
  
<400> 1186

cggacgcgtg ggaaatttta caacttgcgt ttcatagttt tggaactaac ttgacatgca 60  
acaaagtaac cttcgagtag tccaatcttc tttggtggca agctttgtcc tcattctaag 120  
tataatctgt gccattcatg cagtaacagc cgatgaaata acaagtttcg agagaggata 180  
ccaaacagtt gcaccaactc agacgcagca atgtcaaaag atttgtgtca ccgccacaca 240  
aactcaagtt caaagttgta tttatactca gacacaggct ccgttcatgt ctcaatgtgt 300  
cacagcattg ccaactacct gctataaata cgtaacaaaa tataagcagg tgtgctgtga 360  
gcaagaatac gagcaacaga attatcaaca gcagcaggtt tgtcaacagt attgccaact 420

atcgtaccag

430

<210> 1187  
<211> 278  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-022-Q1-E1-E1  
  
<400> 1187

cgcatgcgtc ggaatgtcga tttggttgag tttcgtgtgg tttgcgtaca caattccatt 60  
gaggacaagt cgggtgcttac gttctaggcc ttttgacgca tcaagtcgtt gttcgtagtc 120  
aactttgaaa ggactcgctc ttttcttcat cgagacatgg aatgtgttgc tagaagtaga 180  
atagagcctg tcgcgaggga acatacggaa gttggtctag actctccaat ggatcgaaac 240  
gacgattgta attttggtat gataaccagg attgaaat 278

<210> 1188  
<211> 319  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-022-Q1-E1-E10  
  
<400> 1188

gcaaatagga atacatggat ttacaaggac aagccacttg tgaaaaatat accaaaaaag 60  
gcatcttggtg gacaacgttg gtcgccttgg tcgttggtact agtcacagac gattacctgc 120  
gaatggttca agtattttata ttgggagtag ttttggtagc tatggtaagc tgtctctatg 180  
tgtttattgg acacttctat ttccaatcct atatacttgt agggcgtact tttcccctgg 240  
ccatggtata caagacatcc acttgtgttt gtccacgccg caaccaaaca caacaataat 300  
aacaaccatt cttaaccaa 319

<210> 1189  
<211> 432  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-022-Q1-E1-E12  
  
<400> 1189

caacaataac acgaataata atacaagtat tataactacc aataatagca atgtgagcaa 60  
tcgatgtatt gcctatttga ttgaaacgag caacgacaaa catccacccg agtccacttt 120  
gggtatcttg gaagattgga ccaacagtat tagtggtgct ccacacaatg gacatattcc 180  
tcgaaatata cgattgtctt tgatggcaat ggatttatta caacctttta tttatctttt 240  
gagttgggga ggagaagaag aaaataattg gtggaagaat tggacaagga tgaatatgga 300  
atccacgagt gatgattacc acaagaatgt attgtgggaa agatggcaat ggctgatgag 360  
catggacaat actccacttg tcatcaacta ttcgagtgtg caagaagata atacttggat 420  
gacttggtgg gt 432

<210> 1190  
<211> 443  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-022-Q1-E1-E4  
<400> 1190

ccaggtcgac cacgcgtccg ccacgcgtcc gggatatttc actaccgtgt aacaattggc 60  
atatgcattt ggatatttca ttggccttat tgtggacgtc atatttggtc atgtagagca 120  
tggttggcgt tttatgcttg gttcagtcac tgtgccagct tccctagtaa cttgcggatt 180  
atttttcgct gaagaatcgc cgaggtgggt attagcaaaa ggacgcgaaa atgctgcgtg 240  
gaatgccttg acaaaactgc gttcttctga agaattagcc acgcaagact ttgatgtaat 300  
gcgccagttc ttagagaaaag agcggcagac aatgaaagag caacctggtc tctttcgtac 360  
gctatatgaa aagccaagtg ttcgtcgccc tgtcatgctg ggcaactgcat taaaaatagc 420  
tcaacagttt ttgtgtgtca atg 443

<210> 1191  
<211> 419  
<212> DNA  
<213> Cyanidium caldarium  
<223> unsure at all n locations  
<223> Clone ID: LIB190-022-Q1-E1-E7  
<400> 1191

cggacgcgtg ggcggacgcg tgggtgggtg ctcaaaaagc aggttgtaag attcctgaag 60



tagatcgtgt cgtcgttttg ggcaatcata gcgctacaca atatccagat attactcatg 120  
ccagaatcaa aggagaatcg gccagaaaag ttatcaatga tgaaaagtgg attcgagaag 180  
ttatgatacc taaagtacag cagagaggag ctgaagtaat caaagccaga ggtgcttctt 240  
ctgccgcttc tgcagctgct gcaatagtcg atcatatgag agactattgg catggagctg 300  
gtgaccgatg gtgctctgta ggaattccta gcgatggaac ttatggaatt gatgaaggac 360  
tttggtattc agtgctgtt atgtgtcctg ntggacatta tagacggatc ttgaatctt 419

<210> 1192  
<211> 370  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-022-Q1-E1-E8

<400> 1192

cccacgcgtc cgcggacgcg tcgggttggt caacgcctac gacgtcatcg atcagtgcgg 60  
cctaaccggt cgtgctaaat catacctct cgtagaaacc tacaggtaaa catacggcga 120  
gatctaggt tactataacg caaagaagga attgaaccg atgatcaagg cgatacaaat 180  
gcacatgcgc tcgacaatct gtccatcgca actactcaga ctttactaaa agacatcacg 240  
catgagcctt gcaacgaatt acaagcacta gcagataaca aagtagagga ccaccatcat 300  
acttataaaa ggttcgagaa atatcgtgaa gtacacagcc gatatctacc atcgttaaaa 360  
gcaaaacctg 370

<210> 1193  
<211> 348  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-022-Q1-E1-E9

<400> 1193

gcaaatgaga agggatttga gttgaaagaa gagttgccag cttcggtgaa acggttgatg 60  
aatagagagt ctttttccaa aaatgtcaac gaagaaaaga acaatgcaat gaataagggt 120  
gtcaaaaaaa cagcaaatct atccttgga taaattttga ttccgtaatg agaattcata 180  
cagaagagga atggaatggc tggaattttt caaagcaaaa aaaaaaaaaa aaaaaaaaaa 240

aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaacaaaaaa aaaaaaaaaac aaaaaaaaaa 300  
 aaaaaaacca ccaaaacacc caacaaaaaa aaaaaaaagg gggggccc 348

<210> 1194  
 <211> 436  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-022-Q1-E1-F10  
 <400> 1194

agatggagaa ggacgagcat caggcagtgg caagggaatt ggctattcgc aaacgactcg 60  
 gcaaagtatt taaaaaaaaa agagagaaga ctttgctact gaagaagaat ataataatta 120  
 tttagaagct tttgaagatg ctgtatatag tttgagtga ggaaccaaca cagatgaagc 180  
 ccaagcaagt atggagagac ttgcaaagta tatcaaagac actagtagag aagaaatact 240  
 catgaatcca gttttgattg tggatgatga gagcgaggac aagaataatg agagtagcga 300  
 acaacaagga gtgacctttg tagatcctgc aagaccagca aagcctatgc ctgctccttt 360  
 acgagacaac agtcctgtgg atgagaagat gcgtgcaaga gcttccggat tcgacgaaaa 420  
 actatgtcgt caacga 436

<210> 1195  
 <211> 412  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-022-Q1-E1-F11  
 <400> 1195

agcgattgga agaggctaca gtatctgttt tatccgcgct ggattccatc aggcgttttg 60  
 gtctccacta ttcttcctat actgccaatg cctacattat tcttatcaat atctttttac 120  
 aggaaaagga tattttaagt gctcaacaaa ctgcttcaga gttattagaa atagtggaga 180  
 agattggatt tcatgactta cctttatfff cagatacgat gggaacgtat ggtcctatff 240  
 cctatgcttc cggtgattat gtggaagcag aaaggaagtt acgtttggca ctggattcft 300  
 tacagtcttg gagttgttcc tatttatggt ttgatgttcc tatgaagcac tgtatgcatt 360  
 tagatttgtg gttgatggat tggctttccc gactattgaa tgctcatggt aa 412

<210> 1196  
 <211> 382  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-022-Q1-E1-F12

<400> 1196

cccacgcgtc cgcggacgcg tgggggaaga tatgagtaaa gaaagagttc aaagtgtac 60  
 accttttgat tggaaaactt ttcttcacca gcgtgcttta ttgccggaag aagtttcagc 120  
 tcgttatgct ccaagttttt cacgtatatt tggagataac ccaagagtaa ttctaaggag 180  
 gtcgctagag ttgatgcgta tccctgaaga gcatattcag cttattctca ttgcggtaga 240  
 gtcgttggat tcgggcattg aatcatagta atagttactg atcatttaga gcattgtttt 300  
 gcgcattgagt ttctatttga tgtataaaga ttttagggta acagggagtg tagtttttta 360  
 gccagaagag ccctgcatac at 382

<210> 1197  
 <211> 423  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-022-Q1-E1-F2

<400> 1197

cagcgattcc atgttgaaag agggtaacacg tatattgtcc gatctcaagt ttcaggtgct 60  
 tcaagatgga aaaccccagg tgataacttc ggatcaagta ttcggaggaa agaaagtagt 120  
 attgtttggg ttacctggtg cctttactcc aacctgctct aggcagcacc ttccaggctt 180  
 tggacagaag gttgatgaaa tcaaatacga aggagtagat acagtcgctt gtttagctgt 240  
 caatgaccct tttgtattac atcagtgggc agagtcacag ggagtggcag gaaaaattct 300  
 catgttagca gatggtggtg cgcaatctgt caagaaactt ggactggata tcgatactgg 360  
 tgactttggt ggtattcggt gtcgtcgatt ctcaagcttg attgacaatt atgtcgtgaa 420  
 aaa 423

<210> 1198  
 <211> 361

<212> DNA  
 <213> Cyanidium caldarium  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-022-Q1-E1-F5  
  
 <400> 1198  
  
 aaggtatcaa agtaaagaaa gaaggaaaag gagaagaaga gagggtaggc ttagaagcag 60  
 caaaccagag aggaaagcgt taaagcatga aagaaaagaa atccgaaaaa gaagagaaaa 120  
 aggtaagaaa gaggaccgaa tcagggttaag aggttagagga gcaagaagag aagagagaaat 180  
 gctgggtgga gtagcgaaac aagagaaggg aagtaaaagg taagaaagag gaaaggttta 240  
 cgagagaagg aagtagaaaag aagagagtgt aaggcggcgt cataatagaa atccgaaagg 300  
 agtagaagan nagagagaga agaaggaaaa gaagagaaaa gccgtactga agaacgacac 360  
 a 361

<210> 1199  
 <211> 355  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-022-Q1-E1-F7  
  
 <400> 1199  
  
 cccacgcgtc cgcgcacccc aaaagatatt tataaagaca agtattgggt gtggacaaaa 60  
 aaccaaccgt gggaacctat cttgtacgga caatgtcgtc tacttattac gaaaaagaaa 120  
 aggaaaatat tcatcccaat atctatccca caggagatag gataataagt ggtgatgaca 180  
 ggcagggtgc caggaataga tcccccaaggc agcctttaca acccatttct tacaatacta 240  
 tgcagaacaa tgtccatcga atactgattc gaagtgtacg gtaaagagag gagtgcgcca 300  
 atttggttgg ttttggaggg ataccatatt atatataac gcatatatgt ataca 355

<210> 1200  
 <211> 438  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-022-Q1-E1-F8  
  
 <400> 1200

cggacgcgtg ggccggacgcg tgggtgacga aagtaattat ttagaagcta gctttactcc 60  
 agattcaaag caagttttga gtggttccga agatggctcg atttttatatt ggagcacaac 120  
 aaccgggaag catattgtaa ctttaactgg tcatgaaggc ccagtttgtg cggccaagtg 180  
 gaatcctcaa tatgccatga tggcaagtgc ctgccagaat gtcgtgtttt ggttaccaag 240  
 tgcgttgtcc acatagggaa ataatttgtc ttggtagtta aagccgggct gttttctttg 300  
 gctttgaaca tgattttgtt gcagcatgat gttaagagtt aattataggc actttgatga 360  
 gtcatttatt ctgctgttag cagcaacatg attttcgctt gtaatgacgt tttcttcgag 420  
 tagaacctga acactagg 438

<210> 1201  
 <211> 398  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-022-Q1-E1-F9  
 <400> 1201

cccacgcgtc cgcattaact ggacatactt atcgagtatt gtatttagct gtctcaccgc 60  
 acaatgaatc gattgtgact ggccgcaggtg atgaaacttt gcgatttttg aaggtatttc 120  
 ctgctagtcg tcaagtcaat ggtttggaat cgaaaagttt gctttcaact ggtcaaaatt 180  
 gtttgagata aaataccaca aaccacacac aaaaaaaaaa aaaatccata aaatacaaaa 240  
 caaaaaatat acaaacaaaa aacagattca aaagaaaaaa aaaaaaaaaa caaaaaacca 300  
 aataaaaaaa aaaaaggggg ggccccccaa aagtttcaag ctttaagttac ctttcaatca 360  
 aatttaaaac ccctccaaag gttccccaaa attcaatt 398

<210> 1202  
 <211> 322  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-022-Q1-E1-G1  
 <400> 1202

cccacgcgtc cgcccacgcg tccgcccacg cgtccgaaa actttggcag agaatagtgg 60  
 cttcgatgca caagaagttc tattgaaatt gcagtcagag catcaaaagg gacatattgt 120

tggtgttgac gtggaaccg gtaatcccat cgatcctctt atgttgggaa tatacgacag 180  
 ttttgctgtt aagaagcagc tgctgaacct ttcattcatg atagcatcac agcttttgtt 240  
 agtagacgaa atacttcgag ctgggagaaa tgttccgttc aaatcaggca gtaatcaata 300  
 aaagcatcca ttctcctcc tt 322

<210> 1203  
 <211> 431  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-022-Q1-E1-G10  
 <400> 1203

tgcccttctc caaccagctg tcttgggtatc cgtcacaagg cagaaacca actgacaaaa 60  
 agatattcaa ggagtgtatg ttctcgtgaa agagggtcgt tatttttaac tggtcgttat 120  
 aagaaagact ttcgtccccg caccgtacga cgctcttttc gaatcagttc cctcttaaag 180  
 agagaattgg cggatatatt gcaaaagcat gcgcttcagg acaatagatt tcttagtgaa 240  
 caaacttttg gtttgatttc tgtgggttcgg gtagatgtta gccccgacct taaaaatgcy 300  
 aaagctttta tcagtgttac aggaacggat gccagcgaa cagcaacgta tcagtggta 360  
 caagatgaac gcaagtccat caaatatgag ttgtctcaga gagttcgaga gataagatat 420  
 atacctgaac t 431

<210> 1204  
 <211> 424  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-022-Q1-E1-G3  
 <400> 1204

gccaatattgt acaattctta taaacgtgga ttccgtacca atggagtatc ttttgtatgt 60  
 attttgcga ttgcattatg tcgtctcttg attatgcctt tgttgggttg gtcattggata 120  
 cagttattat tgcacttttg aatattatcg gatcgaacgg acaatattca attgttggtta 180  
 atgatgatag aaacggcagt accatcggca aacaatgtgg tgattatgtg tgagatgggt 240  
 ggaacgagtg aagagcccat ttcgttggcg ttgttgtggc aatttatatt ggctcccttg 300

tttttgacgg caaatatggc gtttttcttg tggctcttga aatagtttac aattcacacg 360  
 ttggatatat tggcatccta tgtaagtttg tgtggaaaag aataattctt tgggttatct 420  
 ttgt 424

<210> 1205  
 <211> 427  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-022-Q1-E1-G4  
 <400> 1205

cggctctgta acgaccactt ttcatttccc aaaacatgtc gctaggaaac aatagccttt 60  
 ttcaatctct aaacgcggct gtagaaaagt cgaaaaagtc aaaaaccctt ccgaactatg 120  
 gggacgggtg ggagttggaa ggtacgtttc gaatgcctcc cgtatcccc agcaactccg 180  
 cctctccttt gagcgaaatg ggtggaagag tagaaccaat gaggttttct ggactaggtt 240  
 cagcgttttc tcggtcttcg gatgacggag atgtggcttc acgacaaggt acaaccgtgg 300  
 actacttggg ggcaagctta tcgcagtttg aagatgcaac gaatgcagcg ggtcaaaga 360  
 gaaagtcggc tcgtaacggg gtttggtatg aagaaaacca caaaaagggc atcttttcga 420  
 agaaaga 427

<210> 1206  
 <211> 411  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-022-Q1-E1-G5  
 <400> 1206

cgaaggatga agagagcaga tcgcaaggct ctcgtacaac tctttcaaag ttacaaggaa 60  
 cctgatggaa attatattgg tgcacaaggt ctacaaaaac tcttcgaaga ccttcaagta 120  
 gaccctagcg atatcgtcac tttggtactt gcgtggaaat tgcaagcaaa gagtgcgtgc 180  
 gagtttacag aaacagagtt tgtagatggg ttggcaaata tgcaagtaga ctcgttggaa 240  
 aaattgaaga agaaactgag ttctttgaga aaggaattgg atgaccttc caagtttaga 300  
 gctttctatc aattcgtatt tgattattcc agggaaacct ctcaacgttc gttaccttcc 360

gacacggcaa tggctttatg ggaagttttg ttgcgaggaa gattcccttt g 411

<210> 1207  
<211> 411  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-022-Q1-E1-G7

<400> 1207

cccacgcgtc cgcccacgcg tccgaaaagc gggaaaggaa aggagagaaa gaggaaaggg 60  
atgaaatgca gagatctcta gagaaggca agaaagaaaa gaaaggaaga cacagtaaatt 120  
gatgcaagca aacatatgac gcaatacatt agatcatagc atatgccatt cagttaagta 180  
aaccgatgag ttgagtagtg tgggtgtaatg gaatagcata acagcacagc acagtgtaat 240  
gtatggtttag ggtagagtcc ataccagaag tgaaatcggg actctaattct gagaagagggc 300  
acattggatt tgaaatgagg tccagtcaag acaagtcagc tctgcagaaa attgggcagt 360  
gtacagggaa gtgagatcca atccagtaga gtggagtaga cataacagga a 411

<210> 1208  
<211> 420  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-022-Q1-E1-G8

<400> 1208

acgccgttca gtgatattat cggtgaccaa gaagaaaaag aagtgaagga agcagcagaa 60  
gtttccatgg gaacggaatt gagcgacgaa gatgtatcca acatccgtga gttgtgcgaa 120  
caagtgatta cattggcgga atatcgcgcc actttgtatg aatacttgaa aaatcggatg 180  
gctgcagtag ctcccaattct gactgctatg gttggagaac tggttggtgc gagattgatt 240  
gcgcatgccg gaagcctcat gaacttggca aagtatcctg ccagtacggt gcagatattg 300  
ggagcggaga aagcactttt ccgagctttg aagacaaaaa gcgctactcc taaatatggt 360  
cttatttttc atgcttcttt ggttgggtcaa gcagcaccca aatacaaagg aaagatatca 420

<210> 1209  
<211> 382  
<212> DNA



<213> Cyanidium caldarium

<223> Clone ID: LIB190-022-Q1-E1-H5

<400> 1209

agaaaagcgt ggtgcagatt tacattcatc gccgcacaca acagtgaaag ataaaagaaa 60

ttcttcacaa tcggatgctt ggtagtacct ggatagagat gttctcgtaa gaatcgtgga 120

atctttcaaa gaaactcgaa acgagatcga cggcatttca gggatatacga aagaaggtag 180

atagaaaaga tgacggatct agcatccaat agtatttggt gtcgacgaaa tgcttggcag 240

tggacatggg ctacttgtag caagtctcac gctagagctt caaatattga gagaaaatgt 300

gtgaatgcat ctctttttta atcgaagtgg tgtacaaccg atcttgacat ttgacgcta 360

ctagctcaat tgaaacctat ct 382

<210> 1210

<211> 272

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-A10

<400> 1210

gggattgttt gtggcgaaact ccttacagtg gtgtatctcg ctttcctagt tttgtccgta 60

acaggaaaca atcaagaaac cgctgttttc aacgcgagaa atagttttag tctcccacca 120

acgattggcc actttgggtt acgtgccaaag tcgacgaaaa agagttgggc ctaactccaa 180

aactgggaag actagtaaata aattttgcag cagctccaga acccaaactt acgaatcaac 240

aattgcttta cttggcaaaa acgttagaac cc 272

<210> 1211

<211> 447

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-A11

<400> 1211

taccggtcaa ggggttcagg acccgtcaga acttgaatga ttgctgtctt cagctggcgc 60

cctaaatact ccgttatttc cgtcatattg ttgttgggaa gaaagacttt gagaattgct 120

tcagacgcat ccaattgtat gtttccataa acaatgtcag aaaacaaact tatctacaag 180  
 aaaaataaga aaacacactt tgcgaaggga ctaaagtacc attaactcca acaaagctgg 240  
 tctccagctt tgagaaagac tttgaggggtc ttgtagacca caaagtgcc tctgtaatga 300  
 tttccagact tggtagaata gctcattatt ttgatcaaag cattctgact cgtgtattgc 360  
 atttggttgt ttgtatattg cgattatatt gtgaagtaag taaagaagga acgaaatcct 420  
 gtgattggaa gaaacaggaa gttcttg 447

<210> 1212  
 <211> 406  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-023-Q1-E1-A3  
 <400> 1212

cgcggtgcagg tggcgggcaa ggatccaggg gtcgaggac gcgtcacgcc cacgcgtcag 60  
 cccacgcgtc cgccacgcg tccgaggac cgtgggaatt ttgaaaggat ttcctgtcga 120  
 gttggagttg aatttagatg aaagagatac ggaaagtgat tctatagaga gaatagagca 180  
 tttgttgagt tgttcgaaga aaattgggtt gaaagttgct tccatcaaca tttgtcaact 240  
 ggaatcggaa cttgttggtg agaattttgt cagactttgg gatgttttga aaagtattgc 300  
 agaggcgtct gtggtagtat ctgtcaatat gcgtcagta caggaatcct gaaatgaggc 360  
 caatttggtc gagatggatt cttcctcaac agaaaaactt gttgca 406

<210> 1213  
 <211> 389  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-023-Q1-E1-A4  
 <400> 1213

gggccgatcg agtgttccat tttctccatc atgttgcttg aaaaaccgtt cgttccaaag 60  
 ctgcgcgttt gataagaact gtgttttctc atgtctcgct ttcctccaga gttgttcttc 120  
 tcaccacaca agacctttgg tccacttggt tataagatat tctcgtctcc tcacaagtat 180  
 gcacaaggca aaggaatcat acagtatctg ggactattct tgaaacctct acaggagagac 240

attgcggtag tggtatgttc cccttcgaaa agagaacact atacgtagtt tgatagaaca 300  
 ttctcgtatt aaagatggat ctgcanagca agttgtattt ctggactttg gtggagaatg 360  
 ttcgtgggaa gaacttgcaa atgtgaata 389

<210> 1214  
 <211> 402  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-023-Q1-E1-A6  
 <400> 1214

gtgggccttc gacaggaag aggactaagt ggggaagcgt tgaagcgttt gaaagttttg 60  
 cagtcgaaa gcttgtaaaa caagttatcg gtgactaatc ttcaagggtta ctttggaaacg 120  
 aacaagaacc ctcttaagag caactccaca ctttagctgc aagctactgt taggctcctt 180  
 gttgtttcca aacagaaagg aaagggtaaa agagggtgct atttgaaga gtatttgaaa 240  
 cgtcacagta tttactgagt ttgcaacgag tattatggac atgacaaagg agccctccca 300  
 agtgataaga taagtttggg cggaacacct ggaggaggaa ctagcaaata tttcctccaa 360  
 attggataag tataactttg ttgcaatgga taccgagttt cc 402

<210> 1215  
 <211> 273  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-023-Q1-E1-A7  
 <400> 1215

cccacgcgtc cggaagaata tgacgagttg gttaatgcag atatgtggaa tgatgccgta 60  
 agaattgccca gtatccaaca aagacaagta cgaaccagcg ttttgcattc caaaagtaat 120  
 ggcgttttat ccttttcagg aaaaacatcc accacaactt ttcgatatcc catggacggtt 180  
 gttatttttg agaatagtat ttttggattt gcagcaggtc caaatgagat ttggagtttg 240  
 aatcctgcag gagaagtcaa gttgatatgt cat 273

<210> 1216  
 <211> 405

<212> DNA  
 <213> Cyanidium caldarium  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-023-Q1-E1-A8  
  
 <400> 1216  
  
 cccacgcgtc cgccacgcg tccgggagga atgttaggag gaggagaagg atatgagaat 60  
 agaggaagag gagagatgat gggagtaata agggaaggag gagtacactc gataataggg 120  
 atgggaatga tgatgttatt aggaagagaa aggagtaagg aagtaaagga gatgataaat 180  
 gtgagtgtaa gtgagagtgg agtatggagt ggagagaaga tgaagaggag tgtaatgaag 240  
 gaggagatta aggagagatg aaataggtgt atgatgcagg caaagaagtg acgcattata 300  
 ttcagagagt acacatgcaa gtaggtanag cgaacgggtg agtaaagagg tgtgaaacag 360  
 tggaagaaca tgaaagcaca gaagaatgta agaaatgggt agagt 405

<210> 1217  
 <211> 436  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-023-Q1-E1-A9  
  
 <400> 1217  
  
 atccccggtc caaccaagcc tccgggaaaa aaccggccca tgggaatggt tgggtgggaaa 60  
 cccctaaaat tggggaaccc cccttcccaa gtttggcccg taccaggaac caaccagaaa 120  
 accccggttt ccaccgcaag aaaaggttta atccccccac caacaactgg caactttggg 180  
 ttaggtgcca attcaacgaa caaaatttgg gcctaactcc aaaactggga aaactagtaa 240  
 atagttttgc agcagctcca gaccctaaac ttaggattca acagttgctt tacttggcac 300  
 agactttaga gccctgcct ttccagtaca agacaaacga gaataagggt cccggttgct 360  
 tctctactgt tcacgttatt ggcgtctgtg aagacgataa aatttttttc aaggagatt 420  
 ctgacgcaca gttaac 436

<210> 1218  
 <211> 357  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-B1

<400> 1218

cggacgcgtg ggaactattg agaagtacaa agtttcccta ttgctggag ttccaactat 60  
gtacattgcc atgttacgtt gtccagagtc agataaatac agtttgaaga gcttgaaact 120  
agcgataagt ggaggagctg ccattcctgt tgaaatatta aaagaatttg agcagaggca 180  
tggaattgct atcatggaag gttatggatt gtcagaaact tctccaactt gttgttccaa 240  
ctctgccaaag ggaggaagga agccaggatc cattggacgt cctgtttggg gtgtagaaat 300  
ggcgatattg gatgaaaatg ataagccagt tcctgacggt cagccagggt aagtatg 357

<210> 1219

<211> 200

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-B10

<400> 1219

cccacgcgtc cgcccacgcg tccgcggacg cgtgggtgga gataggattc cgattagtat 60  
ttcctatctc ttcattogca tggcaagaac aatccgttgc tcatcttata attccaagtt 120  
ggcagtccac tcgtccaact ttggattcgc tgggagcaaa tagaaaattt cataatacac 180  
tttattgttg ttgtattctc 200

<210> 1220

<211> 299

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-B11

<400> 1220

tgcattgctga cgctcatcgtt ttagcagtaa agcctgatgt agtctctgaa gctcttaagt 60  
ccataaagga cggatggaaa ccggaaaaac accttctagt ttccatttgc gcaggagtgt 120  
cgattgggac aatagaacag cagctggtaa gcaaatctag agtcattcga gttatgccaa 180  
aactccgtg tctggttgga gaagcagcag tcgctttctc ttgtggttct tgtgcaacaa 240  
cggacgatca aaaagtagtg gaaaagattt tctcttctgt tggactggca agttgtgtt 299

<210> 1221  
 <211> 405  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-023-Q1-E1-B2  
  
 <400> 1221

agaaagagga aagggatgaa atgcagatat ctctagagaa aggcaagaaa gaaaagaaag 60  
 gaagacacag taaatgaggc gagaaagcat aggaagtga acggattagg aacccgtgta 120  
 gtctatgcag taaaagaaag aatgagtaag aaaaaaggga gtcattccac caggggagta 180  
 aaggcgcaag aaagaaaccc aaagcaattg acgggaatcg gaaaaagggg tggatcacgt 240  
 aaattaatcc gatataaacc gagaacctta cctctccaag aaggtgttgc acggctgtcg 300  
 aaagaacgtg ctgtgaagtg agagaacgta cgagaaagcc aagtgaggaa aagaaggcaa 360  
 gtagagggcg gcccgagaaa ggagaaggcg taagacgtga tacag 405

<210> 1222  
 <211> 409  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-023-Q1-E1-B3  
  
 <400> 1222

cgagacgcgtg ggcggattcc aaaaccccga gaggtgggat tggtgttgtc tccacgagac 60  
 cgtttgcgtc tgtcttcaaa gtatacaatt tctttggttg ttatagttga tttatataaa 120  
 cttggaatgg gaacaaagaa,acaacatatt gtgagcgttt gtaggtacga gagaaaaaag 180  
 ggtgtcttca actgtttatt ttcgatgacc acgtgcaac cgtaagtatg tagtgtaaac 240  
 gcggtagttt tgtagttttt tgtgttctgt gaagcctgtc gcattacaaa aagtgacgag 300  
 atacgtggat ctgtaatcat attagcattg ttcaaggaaa cttcactgtt actctgaaca 360  
 agtggttata gttttcgact tgccaggga aagtcaacag cctgacact 409

<210> 1223  
 <211> 435  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
<223> Clone ID: LIB190-023-Q1-E1-B5

<400> 1223

cggaccgtaa ctcggaacta ggtaaagaag agaggaagca agctactttg aatagttttc 60  
cgtttacaca gagagtaatt gctgctctcg tggacactgg agacggtgac tcgatggctt 120  
cattgacgac aaagataaag ggaagttctc aagaagaacc tttgtggaaa ggattcagtg 180  
atagagatac acaaagatat tatcaggaag tgtttgaaga gagaataaaa gaacagctga 240  
aaaaactagg tctccttcaa cctgaggatg acgactatgt gcagtcgagg attcgagacc 300  
ttcaatggcg ttacgtacg gcanaacatg atgctagaat ccgaagaaca aacctgttga 360  
ctagagtgc gactacggaa tcaaagcggc aagcgactgc angagagatt aaagctcaca 420  
atgatgatct ggaaa 435

<210> 1224  
<211> 419  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-B7

<400> 1224

ctgagatctt ttatgagccg atttgttgcc attcgttgtt ctcgataga ttgacaggaa 60  
taatagatat atacgtatat atatatatat atagagagag agagagagag agaaacacca 120  
aacagtatag atagataggt acattgatag atatacatgg actcgagtca agcgtttgtg 180  
tccactagtg ctctcaatct tatgtacaac aggtttgtga gttgcaaacc caacaacttg 240  
tgttatcgag aaaggctacc gacgaacatt tacaagtcac ttcaggccaa gagaagtga 300  
caagatgaaa atagtttacc ttggaggcta ggggagctac tatccccaag aaagcaattt 360  
gacaggattc agccaaaaag tagggtgcct tctgatgacg caatttgtat atgtggcac 419

<210> 1225  
<211> 378  
<212> DNA  
<213> Cyanidium caldarium

<223> unsure at all n locations  
<223> Clone ID: LIB190-023-Q1-E1-B8

<400> 1225

ggcaagttga gctttgtttt ggcactgttt ttttttgggg tttcactcgt gtgttttgtc 60

tttttaaaac tcgaagaaga ctatttattt cttggtatgt tttaaagtct tttctagact 120

ctgttttttg gagttgttgt actccagtct tgggtggttg tgaatggctc tagtgacaaa 180

gaggggtgtc actttgcgc cattctccac agcttcaact accaacttgt atacgtagac 240

aactacataa ctatattact acagagtcgt ggtgtaaaac gaaaagttga gtggttgaaa 300

aggatggtga aaagcaaagg actantgaga gagagcactt tgaaaccttg taaatttgta 360

cccccaaaa acaatttc 378

<210> 1226

<211> 333

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-B9

<400> 1226

cgctgcagg taccggtcta gagttcaagg accgcttcgg ccaacgattc ggcctttcct 60

ttgtcaattc aaggaaggat accaaaatta tgaaacaaga acctgaatat aattttggat 120

tgttattgga tgctgccaag gcattagggg tgatgggtgt atagccaagg atgtacagaa 180

agggtgtgtt aaatagacaa gaggcattat tatgaaaagt ttattgtttt tttcgtgcaa 240

atatgatttg tatcgtttat atcttgaata tgtgttgtat ttgtttggca ttttgcttgg 300

aaaagtaaaa attgtggagt ttttgaata ttt 333

<210> 1227

<211> 434

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-023-Q1-E1-C1

<400> 1227

cttttgtatc tcatcgtttg ggctgtaaat gttgctaatt gaacagggtg agcaacctaa 60

cattatatat gttgaaaact aatgaacga aaagaagctg gtgtgagcat ggaagtgcc 120

actattagt ctgccaacaa tgactctgaa gatagccacg aagaagtgag gaagcgggtg 180



agtagagtaa gcgctccacc gtttcccgat cctacttctc taggattatc tggtttttagt 240  
 tgcacaactt tcattcttag cgtaatgaat gccaaattat tgccagcgag gattgtacca 300  
 ggaattgtag ggcctgcctt tttctatggg ggaacggtag aaatgttggc gggcctttta 360  
 tgtnttgtca ctcgtaacat gtttggattg gtggcattta cttcatttgg agcttttttg 420  
 cttgcggttg ctac 434

<210> 1228  
 <211> 284  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-023-Q1-E1-C11  
 <400> 1228

agcattcgtg gtttagtcca tttccgctgt ggctgaaaga cttgtgatat tcctgtacta 60  
 gttatggaga aaggaactcg actggtatac aactctgcaa ggagcttgct tgctagatat 120  
 acacgcttga atgctgcttc catcaaatac ttccatacac catctatggc agtttcgacc 180  
 taccgtagtg tctttcaggc aaagcctttg gttggattaa aatatgcaag ttatctgtgg 240  
 aagagaagtt tcgcaacagg aaaagatctt cgatttgcta ctga 284

<210> 1229  
 <211> 398  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-023-Q1-E1-C12  
 <400> 1229

gtgaagtact ttattgttac ccaggttcaa tatgcccaaa gctgcgagta aagaagagaa 60  
 gcccgctca aaacgcgctg tatncccta caacgaatat atgaagaaga tgcttcccgt 120  
 cataaagcaa caaaacccca atctttcgca tcaggaagct tttaagcgtt gtgctgaaag 180  
 ttggaaagac gctccagaga atccaaagaa ccaggcttca gcctaagtta ggggttttct 240  
 ttgaattggg ttttctcaac accaccagga gaaggaacta gtctatttta tatttcgctt 300  
 tgtgtcttca agcacggaat atgaggaaag gtaaaacttt gtcttatttg gtccgtatga 360

gtagttgcgt gtntgtaaaa taaaatcact tttcaaca

398

<210> 1230  
<211> 424  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-023-Q1-E1-C5  
  
<400> 1230

cccacgcgtc cgtgagaagt tgacctctgc tttgccacct ctttttggtg tcgcttatgt 60  
gttttgcctt ttcaaagctt gaagactatt tattctgcaa tgttttagag gcttcttcag 120  
agggtttttg tactagtctt attccgtgtt tcgtagtggg tgaaaggctc ctttcacaac 180  
agcgttgtca tgaaccgcc aatctccaca tcctcaactg ctaacttgtg cgcgtacgta 240  
gaagtatatt tgtacagatt cgtgggtgtag aaagaagagt gcaatgggtg aaaagtaacg 300  
gcagagtacc aatgtacctg tagaggaaac acttgaaaaa gggtcacgtt cttgtacata 360  
tctacctata atagctgttt ttgctcgtag agattgcaag tttagtgtac ttgacaaggt 420  
ttcc 424

<210> 1231  
<211> 376  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-023-Q1-E1-C6  
  
<400> 1231

cggacgcgtg gggagaactt ttggatgatg ttgagatcat cacgccacgc gagccgagtc 60  
aacgcggttg tcaactttct ttgcgtttga agaggcataa attgagggag attcacgagg 120  
ctttgactgg tagaggagta gtatgtgaca cgcgtgaacc agacgttttg cgtgtcgcac 180  
cctttccatt gtataatact tacatagaag tgttggagtt tgtccaaata ctttctacta 240  
ttttgcattc ggccgaaata actgtacaag aacaatagat tttgttttct tattcattat 300  
gaattttatg cttagaaaca atatgataaa tatatttcgt ggttgttttc gtcaaaaagt 360  
aatagcttgt ttgcaa 376

<210> 1232

<211> 319  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-023-Q1-E1-C8  
 <400> 1232  
 gcgaggtgta tgaggctggc ccggatttga tgcagtctgt caccgcattg tagattgcat 60  
 atggtgtcac gatgggttga ttaaagaagt atttgagttt ggtagaacct gcaatcacac 120  
 attaattgtca catatgctta tagtaccgac cacttacgga agtatcatcg ggaatctgac 180  
 atgatgatag ccacattgca cctgagtgag ggtccatcca aggtaactca gcaatgtgga 240  
 accatgtgca aagtacaagg aactacgacc cagtcattgat gagtcgactt tgcaagataa 300  
 gccttatgta gaggggaatg 319

<210> 1233  
 <211> 436  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-023-Q1-E1-D1  
 <400> 1233  
 cggacgcgtg ggcgcagcga ttccatgttg aaagagggta cacgtatatt gtccgatctc 60  
 aagtttcagg tgcttcaaga tggaaaaccc caggtgataa ctccggatca agtattcgga 120  
 ggaaagaaag tagtattgtt tgggttacct ggtgccttta ctccaacctg ctctaggcag 180  
 caccttccag gctttggaca gaaggttgat gaaatcaaat cgaaaggagt agatacagtc 240  
 gcttgtttag ctgtcaatga cccttttgta ttacatcagt gggcagagtc acagggagtg 300  
 gcaggaaaaa ttctcatggt agcagatggt ggtgcgcaat ctgtcaagaa acttggactg 360  
 gatatcgata ctggtgactt tgggtgtatt cgttgtcgtc gattctcaag cttgattgac 420  
 aattatgtcg tgaaaa 436

<210> 1234  
 <211> 392  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-023-Q1-E1-D11

<400> 1234

gtgaaagggtt cttattagag tctgcattgt cttattattc attccgagat ttgacgagtt 60  
ggacatcttc ggacatgatg tatgtaggag atgtatggac gaacaatcgc tcttcgcaac 120  
ctttcataga gtcganaccc aagacgagta gtaatacgtc gaaacgtagt cgtacagttg 180  
tcgataagaa gaccgaagct acgaatgctc ctttatccag ttctggtagt cttttggaga 240  
gtttacaaac tttgatgaat atgtttcctt gtacaagtga tgttgctatt cctgatgtga 300  
attatgtgtt gaaccttatt ttaagtacac cagagagcct gaatgtccaa gaccaaagt 360  
ctcgaaggga gaagaganag aatatgagta gt 392

<210> 1235

<211> 419

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-D12

<400> 1235

cccacgcgtc cggaaaggaa gacacagtaa atgaggcgag aaagcatagg aagtgaacg 60  
gattaggaac ccgtgtagtc tatgcagtaa aagaaagaat gagtaagaaa aaagggagtc 120  
attccaccag gggagtaaag gcgcaagaaa gaaacccaaa gcaattgacg ggaatcggta 180  
agagatgaaa gaccactgca tgaggataag gaatctaact gagtaaggaa aataagctta 240  
agctagtttg gctggggaag taaagcctaa gaaagagtaa attaggcaag caaagggcatg 300  
agagaagtat aatagcagaa gcatgcttga agaaaaagaa agagatttca gaaaggggaag 360  
aaaagtcagc tatagagaac aggtgaagga gaactcaaaa agaggagagc accgaacga 419

<210> 1236

<211> 439

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-D2

<400> 1236

aggaactctg caagagtatt aatcctgatg aggcagttgc ctatggtgcg gcagttcagg 60  
ctgctatttt gactggtgat gccagtgaga agacgaagga tctttttgta ttggatgtga 120

cacccttgag tttgggtatc gaaactgcag gaggtgtaat gacaaaactt atcgagagaa 180  
acacgactat tcctacgagg aaatcacaga tattcactac gtatgccgat aatcagcctg 240  
ctgtgactat tcaagtatat gaaggtgaac gtgcgatgac gaaagacaat aacttggttg 300  
gtcgttttga cttgacagga attcctccta tgcctcgagg agtacctcag attgagggtta 360  
cgtttgatat tgatgccaat ggtattttga atgtgagtgc agtggagaag agtacaataa 420  
gagtaataag ataactatt 439

<210> 1237  
<211> 425  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-023-Q1-E1-D3  
<400> 1237

cggacgcgtg ggcgatggca ggaccttggc tcaagtatcg aggtcacctg gataatattt 60  
ccaacaacat gttcatcggt gctatcaatg cggaaaatgg caaggccaat tatgtgaaga 120  
atcaattgac tgggtcaatat ggtccggttc ctgatactgc tcgtgcatac aaagctgctg 180  
gattgccatg gattgttatt ggagatgaaa attatggaga aggttctagt cgagaacatg 240  
cagcactgga acctcgatcat ttggggaggtg ttgctatttt ggttcgttct tttgcaagaa 300  
tccatgagac caacctcaag aagcagggcc ttcttctctt gacatttgcg gatccggcgg 360  
attatgatcg tattagccca gatgaccgca tttctatttt gggattgaag gacttgaaac 420  
ctgga 425

<210> 1238  
<211> 395  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-023-Q1-E1-D4  
<400> 1238

cccacgcgtc cgcggacgcg tggggagaca attctcccaa tgcggatgct gcagacgcta 60  
ctccaagaag ccgtttatta ttgcatcaag taaaagttgc tctacagcat cgaataatgc 120  
agttagaaga gcaactaaag cagttgaggg ataaacagag cacagaaagt gatacgaaaa 180

ccatctctat cgtcaaggaa ttgcaggttc atttgaaca agcagaacag agaatccatc 240  
 agttggaaga agaaaaggaa cagatcgcaa ttgcacatga tcgacttttg gaagataatg 300  
 cggcggttaga aactgaaaac gaacgtttac agttacagtt gagacgggct gtagaagctg 360  
 cttcatatta tagtggtaga gacactgtgt cccct 395

<210> 1239  
 <211> 319  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-023-Q1-E1-D5  
 <400> 1239

accacgcgtc cggaaaggaa gacacagtaa atgaggcgag aaagcatagg aagtgaaacg 60  
 gattaggaac ccggtgtagtc tatgcagtaa aagaaagaat gagtaagaaa aaagggagtc 120  
 attccaccag gggagtaaag ggcgaagaga taaaccaca gcaattgacg ggaatcggta 180  
 agagaggaat gaccactgca tgaggataag gaatctagcg gagtaaggaa aataagctta 240  
 agctagtttg gctggggaag taaagcctac gaagagagta catgaggcaa gcggaggcat 300  
 gagaaaaata cactagcag 319

<210> 1240  
 <211> 436  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-023-Q1-E1-D6  
 <400> 1240

ctcaaattgt ccacaaagcc ttgcatcaca tttgggattg gaattggaag acttttgtat 60  
 tggtagaaga aaagctgttt tttccttggc tccgaagctt gcaagtcaaa tctgcgtatg 120  
 aagggatcct ctcagagctg gaaaaggaac gccagcgtgt agtggatgtt tcctccaata 180  
 agcaacaaca aagtcactcg tcgcctcaac attctttctt ttctcgttgg caagacaagt 240  
 ttgccaacat tggttttcaa ccttggtttc tgtggaagga tagatcgaag caaagggaat 300  
 cagcctcgac agcgtcgggt gctacgtgta aaacatggaa agctgataca gaacaacaat 360  
 atcaggagct attcaagaca tatcgactcg tcaccttatt gcatgacctg tgtgaccaat 420

atttcgatca tgaaag

436

<210> 1241  
<211> 344  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-023-Q1-E1-D7  
  
<400> 1241

gtggaaccga tgccttccca gcaaatacaa tactctgaaa aatattatga cgatacctat 60  
gaatacagac atgtcatctt acctccggac atagcaaaac tgctccctaa aaacagacta 120  
ttgtccgaag cagaatggcg cggctctcgga gttcaacagt caagggggttg ggtacactat 180  
tcaatccatc gtccagagcc aaatatattg ttattcagaa gaccgaaaca aacagaggca 240  
caacagactc aaaatagtat gggttgcaaa caacaacaaa accaagagca gagaccagtt 300  
gacgtcgtcc cctaatacatt acgagtaaag ttttattgaa cttg 344

<210> 1242  
<211> 418  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-023-Q1-E1-D8  
  
<400> 1242

acaagcttgt aagcgtcacc acaaaatacc tatgggcaag attgatacaa cccgaatgtg 60  
gcaagttggc aagcaagtca gaaaaacaag agaggaatcc agtattccca tcgttccttt 120  
ttctgcaggt gtatacattg cagctatgat ggctcagatt gacattttga tggaaaaggg 180  
acatccggtt tcggaaattg tcaacgaatc cgtcatagaa tctgtagact ctctcaatcc 240  
atatatgcat gccagagggtg tttcttatat ggtggataat tggttacta ctgcaagact 300  
tggtgcgaga aagtgggcac ctgcgtttga ctataacatt tctcagcaag catttcctgt 360  
tcttgacaat caagaaccgt ttgacatgcg caagttggat gaattcctaa gtcaccc 418

<210> 1243  
<211> 418  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-E1

<400> 1243

cccacgcgtc cgcttccaaa gcgatgaaca tgtggggaga tcgtgctgcc aaagtgctga 60  
 gagaagctca gtatccagat acttggcctt atacggaaga agacttttct agacttgacg 120  
 aaagcaacga tcaattattt tattctcaac ctagattggt ttatcatatt gatgagtttg 180  
 ctataagagc actcacgaaa ttttacaaaa acaactttgt tcctggtgct gatatttttag 240  
 acttgctcaa gttgggtttc acatttcctt gaggattaca aggcagggtt tgtggctgga 300  
 ataggattga acgagttgga attgtcaaag aattccagac ttgatgaata tcatgtgatt 360  
 gatttgcagg agaatccaac atttccttat ccaaatgata gattcgatat tgtgacta 418

<210> 1244

<211> 66

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-E10

<400> 1244

ctcatggagg agttgggtac ggagggagtc cgaacgggat gggatatgga cgtatctgga 60  
 gtctctg 66

<210> 1245

<211> 372

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-E11

<400> 1245

cccacgcgtc cgccccacgcg tccggcgtgc tgagcagtag aagcctattg tagttgaata 60  
 tttgggttgc atctttacta tgtagagacc tttcatatt actctaaaca tcgatatatt 120  
 gtatggcttg ttttgactga gaaagacttg tttattcaca aactattgaa aaatggagct 180  
 gttgccttgg agttgctcgg aaaagggttg agctctcaa aagttacaca acctgcgcgt 240  
 tgtcttttga ggtggaagct tctgaaatac ttttgcagac ggttttttggc agcacgttgg 300  
 ttggactttg gtggagtcgg gtatgctatc cttgctctt aacttacaca cttggttcac 360



aaggcactat tt

372

<210> 1246  
<211> 424  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-023-Q1-E1-E12  
  
<400> 1246

cccacgcgtc cggttccctt gtgctgctgc ggttcccaa tggaatgaca acctctgctg 60  
gcttggttgg ccttacgtca ctgtcactcg agaacacaac aactaaaagg aattcctttt 120  
aaaataacaa aacaagatgc tatagagaga tttttgcatt ggtccaatag caaccctttg 180  
ggaataagat tggaaccttg ttcgctacag ttgaaaactt tgcacgtacc cttgtttctg 240  
tttgaagcag atgttcattc agagtttgaa tatgaaaaaa catcgatggg gcgactattt 300  
tatcagtcct tagtgagccc tcgaaagact tgtcattttg gcgccaatta tttcgaggc 360  
acagacaact ttcgatacac ttgtggaaat gtacatatgc agctgtatgc tggcccccaa 420  
cgct 424

<210> 1247  
<211> 410  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-023-Q1-E1-E2  
  
<400> 1247

aagttttgta ccgtcacttg caaaaagtaa tcagtagaca tcacttagca gccactgtcc 60  
ataaacgacc atcgtcatag gtttgtacct cctgggtgacg acattttacc ccacgaaagt 120  
gtcgtccgaa gtcacgggac tatggttcaa ggctcaagac ttatttccac tgtaacatga 180  
ttggtagagc gagtgaacaa actcgtggct gttttgccga tacgagctcg ttactcggct 240  
gaagttgggg acgtagtcgt tggccgaatt cgagatgttg tagcaagaaa atggaaagtg 300  
gatgtgaacg ccagacatga cgcagttctt catctttcgg cagtcaattt acccggtgga 360  
gttcatacaa ggcgatctta cgaatatgaa ccaaaaatgc gtgaactttt 410

<210> 1248  
<211> 428  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-E3

<400> 1248

aacccttaaa aatgtcatcc caggaacggc ttgtccctcg tggcgccttt gtgctctctg 60  
atgggaaaat aactataaga ataccaaatt taaagagacc tatttataga agaaactgcg 120  
tgcaccacaa acaaattact tgctcaaaca caaatgactc gttttcctgg gaagggtgga 180  
aactaggccg tttatttcga cagtttttaa agaaaacagg acatttcctt cttcacgaac 240  
gaaattccta cgttttcccc caacctgaca gtgttctaaa gttacctccc gcaaaaagta 300  
ctcctgaaca ggaattccaa aagttctcag aggaagcacg cttcaagtac agcctagaaa 360  
taaagtcttc gccaacagca aagccacagg agcaacttgt aagtatatct agccaaaacg 420  
ccactcta 428

<210> 1249  
<211> 418  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-E4

<400> 1249

attgaaagga gggcgcacga gctcagcttg aagaacaaag aacttgcggtg ggggttgacg 60  
ttatttatga acttggaactc tattgacaca ggaattaatg ctctttttga cccgtttgca 120  
gacgcctcac gtggagagga cgcagcagta accaaaaata tagtgcatat tcgcgtgcaa 180  
caaagaaacg gccgcaagtg cttgacgacg attcaagggc ttgacacaaa attggatttg 240  
aataaaatta caaaggcctt caaaaaggag ttttggttga acggttgtgt cgtagacgac 300  
gcagaactgg gaagagtcac ccaactgcaa ggagaccaga cggataaagt caaaaagttt 360  
ctagttcaag agaaattagc tgaaaaagac ctgataaagg tgcacgggtat atgagtgt 418

<210> 1250  
<211> 377  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-E7

<400> 1250

acgatacggc actaggcaaa tggatatggt atctgcggtga gaacatatga aggaagcagc 60  
agcgactgtt tagcaaaaac acagcactct gcataagagt caaactgtga agtatatact 120  
gtgcggcctg acaattatta aagaacaaat cgatgaaagt gaaaggccag tcaaagctag 180  
tgataactgg tactcctcga aagctgtata agtagcgtat gcaggaaaga agaccgtatc 240  
ggaatagaag gaagaagcag agacggacta tgatcgagaa ggtggatatt cgacagggac 300  
ttagcccaat gtccaagaga aggtatcaga gtccagaacc aatgaaaacg agaacaccat 360  
agggtacgct tagaatc 377

<210> 1251

<211> 384

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-E9

<400> 1251

tgaaaattta atccaccgtg gctcattctt gttgcagata tgacagggtcg tggtaaaggt 60  
ggtaaaggtt taggaaaagg aggtgcaaag cgtcatcgca aagtcttgcg agacaatatc 120  
caaggaataa ccaaaccagc tatccgtcgt ttggcgagaa gaggtggagt gaaacgaatc 180  
tcaggactta tctatgaaga aacacgaaat gtccttcgtg ttttcttgga aagtgttatt 240  
cgtgatgcag ttacttatac ggagcatgct cgtcgcaaga cggtaactgc tatggatgtc 300  
gtatatgctc tgaaaagtta aagccgcacc ctttacggat ttggacgata caacctgctt 360  
gaacaaaggg tgttttctcaa cacc 384

<210> 1252

<211> 312

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-F1

<400> 1252

cccacgcgtc cgtgtcttta gatgcaagaa gcattagctc gtcagaaccc acatccaccc 60

gattaaggca ttcaactacg tgagttaaat caaaagaacg atttctctgc caaatattaa 120  
ccagcagata catcccatct ttttcttacc tcattactgt aaggatggaa catatactca 180  
aaaaacaatc gaagtatata cttctcttct gtttcagacc attgtggatt cgttgagcca 240  
tcttcccaat cgagaacgaa accaaagagg ctgataattc ggaataaacg actcgcattt 300  
aatcttctat tg 312

<210> 1253  
<211> 244  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-023-Q1-E1-F10  
<400> 1253

cggacgcgtg ggcggacgcg tgggaggacg cgtgggtgcg actcacaggc ctgggtggaa 60  
tttaaagatc tttccattgc atgccagata aagtaaattt ttaaaaaaaaa aaaaaaaaaa 120  
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaatgg cgaaaaaaca 180  
aaagaaaaaa aagcatcaat aaaaaaggaa aaaaagtcac aaatcaccta aagtgtaaac 240  
aaaa 244

<210> 1254  
<211> 378  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-023-Q1-E1-F11  
<400> 1254

caaaaggagt ccaaactctt cgaactgcta tgcgttttac ataaaccggc aatgcgacgg 60  
aaaccttgaa attcaagttg cttccttttt acccgtttag cttgataagg ggtttgcggt 120  
gccaagatgg agtatctgcg catacgtcta tgcgaaagag aaagactagg gcaaaagaac 180  
gaatgtaatt cgataaagag taaacatgca tagcactggt attagagcaa ccgctggttg 240  
gtttttttaca tagtcaactg aacatgcctt ggtatcttgc gagttgagct accggtgaac 300  
aaagttacca agccattttg gaatcgttta ggctttatgt cgagtggtaa ttcaagtaca 360  
ttttaaaaga atgctgct 378

<210> 1255  
 <211> 402  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-023-Q1-E1-F2  
  
 <400> 1255

caactggaag ccaacgtttc tactccaagc aatcgcgctc ctgaattaga aaggacatct 60  
 aatgtagatg tcaactggtgg gtcttcttct cgattggata gcagttttga tggcgcagtg 120  
 gagtcggcaa acaaaaagga cttcgagaac gacgaagagg ttgtggttta cgtggaagat 180  
 gatgagtggg ctagtcctat gcgtttttat gcatatcatc cagaggagac agacgaagaa 240  
 cctcaagagt cgaaggcatc tccagaacga gaaaatgctt ccaaactcgac accgattgtg 300  
 cagcaagcgt cttccactgc nacaataaac tttcaacata ccgcaacttt aaagttgtaa 360  
 gatgcaaaag tgtggtacag ttgttactta gtcagttaac tg 402

<210> 1256  
 <211> 415  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-023-Q1-E1-F3  
  
 <400> 1256

cccacgcgtc cggaggtgag ggatcactcg ggaaccccaa gtgccgtacg tttttgctat 60  
 ttctcttgta taggaaagaa agtatctgag aagaattaag gtagaattga aaatTTTTca 120  
 agtatTTcgc gagtaataat atctgctgga atactTTTca actactagag gttctTTTTg 180  
 cttgacgctg tttgaaaaca acggaatgat tcttgcctg accagtcgat actgtcaagt 240  
 gatgactcga agaggtatcc aataacttgt atttccatc gtttaacaag aggcttggtg 300  
 aaaaaaagca gcgataact ttgtgcggat tgcgtcggct taagttgctc acttttctgc 360  
 tgaccaagag gcttcaaaac ttgcagtcaa gatagcaata tattctcact gagga 415

<210> 1257  
 <211> 349  
 <212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-F4

<400> 1257

aataacttga atattgaaga agagccgaat gagaacccaa tgaatacttt ggcagcaatt 60  
tcagagtcgc gactctcctt tcaaatgaag cagtcctccg tgggcacaag ttatcctcca 120  
cagaacactg cacaagagtc cagtagtgga ggtgtaaaaa gtagcattca caatgaagag 180  
tcagttagga agtctggaag taaacgatgg ttgttcggaa caaaccaatc catatgtgca 240  
ttatcagaga aaggtggcaa gaaacctcgt cctcggggat atgtagtgaa cgataatgat 300  
atgcctttga tggaaaactc aatcgacgca ttccaaagct gcagctaaa 349

<210> 1258

<211> 445

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-F5

<400> 1258

atgtctcgtc ccaagtgttt ctttgatatt gctatcgggtg gacaacctgc aggaaggatt 60  
gtattcgagt tggtctccga tgctgttcct aaaaccgcgg aaaatttccg tgccctgtgt 120  
accggtgaga aagggtttgg gtacaaagac tccaagtttc ataggatcat tccccagttc 180  
atgtgccaaag gtggagactt tacacgcggc tatggaaccg gtggcaagag tatttacggc 240  
accaagtttg aggatgaaaa ctccaagttg aagcattcgg agcccttttt attgtccatg 300  
gccaatgcgg gaccgaatac caacggaagt cagtttttca ttacggtagt gaagacacct 360  
tggttgatg ggaagcatgt ggtgtttggg aaggtttag aaggtacgga tatcgtgaaa 420  
gctatggaag ctgtgggaac acaaa 445

<210> 1259

<211> 270

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-F6

<400> 1259

gtaagccaag tcatttggct gacaagagac taagacggac ttgtctttgc gtttcgtgtc 60  
acagcccttc aagtgactct gagcaacagt tggcctgttt tcgttggttg cgtgatatgc 120  
agaatattgt aacgctgctt cttattagt gtttgattcc aagtccgctc gttaatgtaa 180  
gcggtgcagc agcaagttct ttttcaacta tgtacaatgt ggaaaaatat gaaagccatc 240  
cttctgtttt gggttggttg ttttgaacaa 270

<210> 1260  
<211> 411  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-023-Q1-E1-F7  
<400> 1260

gtgaggcatg ggatttgcag agttcgaacg ctcttatgag aagtatacag gaggtgatcc 60  
atcgagaatg aaagtgtccg tggagaaact agacgaagag ccacacgacg atcatagagg 120  
ttccacttca taaaagagac tattgtgcac atttgtatat tcctttgcgc cgttggttga 180  
gagacaacta ttttttgccg tgggtcttggt aggaagagaa ggaggcgtat aaccggtgcc 240  
aaagaaaaga gagaagaaga agagaacgac tctataagaa aatcaaggaa gaggcctcca 300  
aagtatcggc gacggaagaa caagatgaat aatatcgtgt tgggtgcgtcg tctttgtggt 360  
ggaacaataa taactcctca aatagtaaac aacttgattt gattttcaag t 411

<210> 1261  
<211> 440  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-023-Q1-E1-F8  
<400> 1261

aaattttgtg tttaatggaa tctgatggaa tagagccgga tagagttact tataacacct 60  
tgataaaggc atatggctac atgcgtcggc atgatctcgc agaagctacc tttaagcaac 120  
agatttccaa gtttgaccg cagttgggtt gctttaatac cctaataaat ggatactgtg 180  
aagacaaaaa gtttgctcgt gtcttggaac tatttgcgca actcaaggaa ttgggtttga 240  
aaccagatgt taaaacgtat tctactatta tcaagggaca aatattgtct ggtgagaatt 300

catctacagt catgtgttgg tatcgacaga tgacagacga aagtgtttat ccggatttga 360  
agcttgctta atctgtacta acctttttca acagaaatac atgtgcagaa ggagtttgtc 420  
ctgtgttgaa cgacttgcct 440

<210> 1262  
<211> 407  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-023-Q1-E1-F9  
  
<400> 1262

ccaacccttc ggggcaaatt tccggacttg gggatggaaa atcctccttg gccaaaacac 60  
catatttcat tgcaatggaa accgacatat ttacaaattg ttaatccgcc ttgttcattg 120  
aaaaatttgc ttggtttaca attatccaat caaaagcgac attggatagt ttctctttca 180  
caatttcgag aagaaaagaa tcacgcctta caattgtata ttattcatgg gcttattcag 240  
cgacatgacg aaaaggatct tcaagattta tgtctcgtga tgatgggcag tacacgtaat 300  
gaacatgatg cagaaagagt tgctcaactt tgtcgtttgg cagatgaatt gaatatcaca 360  
tgctacattc gtttcatcgt caatgcaagc catgaagaaa tttatga 407

<210> 1263  
<211> 419  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-023-Q1-E1-G1  
  
<400> 1263

tggagattaa ggctgagaag gagcagtagt tcgcttccgg agcctgaaac aaacactcat 60  
atatacatat acatatatat atttcctata tatatagcta ttcttcaaat ggtttccaaa 120  
aagacgaaaa aatccaccga aacagtctct tcaagattgg ctctcgttat gaaaagcgga 180  
aagaccacgt tgggcttgaa aagtacgttg aagagccttc gtcagggaaa aacaaaactc 240  
gtggtcttgg caaataactg tcctcctctt gtgcgctcac agattgaata ttactgtcta 300  
ctcgccaagt gcaacgtaca ccactttcaa gggataaaca tagaactagg aaccgcttgt 360  
ggaaaatact tccgttgtgc ttgttttagga aattttggac ctggtgactc tgatattct 419



<210> 1264  
<211> 340  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-G11

<400> 1264

gttgtggagt aagtgcgctt ggcaacaaac taaaagatgg caagaagaat catcggagct 60  
tatatgtctg acgctactgt agcgtctcta ttagtgtga aaatgttggt ctaccttaca 120  
atacttgcgt tctctatcac tattgtgggt cttatgggta agagttccga cggatatttg 180  
gttcacagtg ttccagcgaa agacgaatat tgtgcataca agtcttccct tcaagtaaac 240  
caccacggca tagcttcta ttgcaagtat atcatggctg tagcagctat tggtttggtt 300  
atcagcttct tcgagttttg gtatgcattc ctcggaattt 340

<210> 1265  
<211> 362  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-G2

<400> 1265

aaaacattgg ctgatagata tgcgtctcaa gcagttcaaa caaagactgt ggaagggttg 60  
gaaacaaccg ctgatttacg aaaaaagttg attgcgactc atattaacgc tctccctggt 120  
cgtttccaac gcgcaagaga agagttgaag gattttgtac aaaagactcg tacgttggac 180  
tttacgtatc ttgatgcgtt tcgttttggt ttccgaagct tagagttggc ggcattgtac 240  
tggtatcgaa agaccttggg gaagagggaa cttcccaact cgatatgaag tgtgtcttcg 300  
gcaactcttc ttttctcgga aatacaagct tttatgtgct cgtgttttat aaaatatagt 360  
tg 362

<210> 1266  
<211> 432  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-G3

<400> 1266

ctcagcttga ggaacaaaga gcttgcgtag ggttgacgt tatttatgaa cttgggctct 60  
attgacacag gaattaatgc tccttttgac ccgtttgcag acgcctcacg tggagaggac 120  
gcagcagtaa ccaaaaatat agtgcattat cgcttgcaac aaagaaacgg gcgcaagtgc 180  
ttgacgacga ttcaagggct tgacacaaaa ttggatttga ataaaattac aaaggccttc 240  
aaaaaggagt tttgttgcaa cggttgtgtc gtatacgacg cagaactggg aagagtcac 300  
caactgcaat gagaccagag ggataaagtc aaaaagtttc tagttcagga gaaattatct 360  
gaaaaagacc tgataaaggt gcacgggata tgagtgtcgt tgccgtgtaa agaaacaaag 420  
cagtcgtcag tg 432

<210> 1267

<211> 436

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-G4

<400> 1267

atttcttttg ggtgtgaaga gttgcgcaaa agagagaaa agagagaaat ggcaacgacg 60  
agtgaagag gaggaggaag tggcgggtgt cttaccggac ctccaaaacc accacctcac 120  
gcagcaatac aagatggacc tcctcctggt gggtatccac cggtaggatgt tcgtagaaac 180  
ttgccccaaag ttgggccttc cgggtactact ttgttgatag gcatcggact gatcaccatc 240  
tatgggtttt ggggagcgac caaatcagct caacgtagaa gaagactgaa ccaggaaaag 300  
tatcaaattc gattggctat tacgccgtat ttacaagccg aacaggaccg tttggaagtt 360  
aaagagacgc atcgctgcct tcgtcaagaa gcagaactta tgaaggatgt tcctgaatat 420  
caaccgggag aaaatt 436

<210> 1268

<211> 444

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-023-Q1-E1-G5

<400> 1268



aaaccgcaa atataaaaga tatacagcaa gacaaggaga acctttttaga atcctggacg 180  
gaaacgagtc tttcatcaag aattgctcaa aagtggggaa agttaccgag taccagtttg 240  
ttttatctac actctccttc tactagtatt gtcataaag agtctctctc ggatgagaac 300  
gataaaaatc gcatcgattt ggaacaacta ttgcattcta caaagtcctt ttctatttcg 360  
gacagccgct atccttttcag agacgaaaaa agcaccaacc atcgacaaca tttattacta 420  
gatac 425

<210> 1271  
<211> 406  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-023-Q1-E1-G9  
<400> 1271

ccaacgcttc gggaggaacg atgaattggc aaaccggtcc taggaatata attgttaaaa 60  
ggatacaaac gctacggctt ttctgggtga ttatttgcaa cgttttccca tatagttact 120  
ctatacaatt ttatatgaac gctggaacga agcgttgtct ttcggaagaa attacctcaa 180  
acacaaaggt gtttggtgaa tgtctttag tagtgcaaca gaagaacata gataagcagt 240  
tgttgattcg aggacctcaa ggggagacta tagtgcaaca gaagaacata gataagcagt 300  
catttagctt cacaacacca cagcacgttc ttgctggaga ttcgagtttg gcttccaacg 360  
atattcactg gcctcctgca agttatcact tttgtttcga agctag 406

<210> 1272  
<211> 338  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-023-Q1-E1-H10  
<400> 1272

tcagcccacg agtccgcccga cgcgctccggt gctgtaaagt gagaaaacgt acgagaaaac 60  
ccaattgagg aaaaaaaggc aagtaaaggc cggcccgaaa aaggaaaggc cgtaagacgt 120  
gatacagagt aggaaaaaca aaaaaaacg caaaaaaaa ccaagaaaaa aacaaaagca 180  
acaacaggaa aaagcgggac cagcaaaaaa aaccgaccga agaacaacag caaacaagac 240

gcaaagaacc caaaaaaaaaa aagggggggcc cccccaaaag tttcaacttt atttaccgcc 300  
 taatgcgagg ttaaaacccc tcaaaaaggc ccccaaaa 338

<210> 1273  
 <211> 237  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-023-Q1-E1-H2  
 <400> 1273

ccgccaaagt ttcacctctt cgagaggaac gtaatccatt gaccaagtgt gagaacccaa 60  
 gtccatggaa aaggaacagg aaaggccaga caactaccca ggaggtctag agtacatcag 120  
 gaaccacaca tcacggcagt atgactccga cacggagtaa tgtgaatgaa ggcaggaaac 180  
 tcattcaaca cgagagtgtt ccgcgcgtac cttttccata atgtcccagc gaggtagc 237

<210> 1274  
 <211> 416  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-023-Q1-E1-H3  
 <400> 1274

atcagcttga agaacaaaga acttgctgtg ggttgagctt ttttatgaa cttggactct 60  
 attgacacag gaattaatgc tccttttgac ccgtttgcag acgcctcacg tggagaggac 120  
 gcagcagtaa caaaaaatat agtgcattat cgcttgcaac aaagaaacgg ccgcaagtgc 180  
 ttgacgacga ttcaagggtt tgacacaaaa ttggatttga ataaaattac aaaggccttc 240  
 aaaaaggagt tttgttgcaa cggttgtgtc gtagacgacg cagaactggg aagagtcac 300  
 caactgcaag gagaccagag ggataaagtc aaaaagtttc tagttcagga gaaattagct 360  
 gaaaaagacc tgataaaggt gcacggtata tgagtgtcgt tgccgtgtna agacac 416

<210> 1275  
 <211> 401  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-H7

<400> 1275

gggcgccatt acatacaciaa ggcgttggtg tggttgctat gcagtacata aaccgaatca 60  
aagtgaagtt ttctcaaaag aaaacaagtt cctcccctgc acatactatt tcagatataa 120  
gggaacacat tgaacttctt gagaggaagc agcaattaca gcaagcaaaa gtggatgccg 180  
aggtacaaaa ggccaagaaa cttttaatgc aaaaggatag aagagggggcc cttatggcgt 240  
tgaagcgaaa gaagcttctt gagaaggaaa ttgcaaacac ggaaaatatt cgttacaact 300  
tgagagctaca ggctctcaca cttgagaatg caaacgcaag tgcacaaaca gtggacgcct 360  
ttcgaagagg aaaccaacag ctgagaaggg ctcacgacaa g 401

<210> 1276

<211> 244

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-A1

<400> 1276

cccacgcgtc cggctcgaaag tattgcatat cacgttaggt caagagtgac aatgcgagta 60  
gcagtatgag tctggacttt ttggctgcag ctttggtttt tacacaattc aacaccgcac 120  
atgaaacca tagtgtcagt agaaggctgc gtaaccatga cgtcatgttt acgcattcgt 180  
cgacacattg agtgcaatga ctatgggaga aagtcctata tgactccaga aatcgcatat 240  
atct 244

<210> 1277

<211> 414

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-A10

<400> 1277

tgtatggaga ccaggcaaca gctctcgctt atcatctgta taagagttca tcgttgcttc 60  
cttacaaga agatgcagtt cgtcaagtag tgcaagaaat agaccaactc tatgccaat 120  
tagtacaact tttagaaaca gccacaacg accttagtga cccaaggata ggaggaacag 180

ctatatcttt tcacgagtc attcttcgta ataagcgatg tggtcttgca tacttacttc 240  
ataggtttta tcgtttgccc gatagtagat atctcgtaat ggatgaccga atagaagaaa 300  
atttaagtgc ttctgaacaa gaattgttga caaactatga acaacttgta gccagctaca 360  
gtgataaggt gcaaatagac attctctcgt cgttgatatcc aactcgagcg ttgt 414

<210> 1278  
<211> 369  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-024-Q1-E1-A11  
<400> 1278

gaggaccgaa tcagggttaag aggtacagga gcaagaagag aagagagaat gctgggtgga 60  
gtagcgaaac aagagaaggg aagtaaaagg taagaaagag gaaaggttta cgagagaagg 120  
aagtagaaag aagagagtgt aaggcggcgt cataatagaa atccgaaagg agtagaagaa 180  
aagagagaga agaaagaaaa gaagagaaaa gccgtactga agaccgacac aggtactcga 240  
ggagaaatga gacccaaatt aaggtgagag aatggacgat aaggaactaa gcaaaaggat 300  
atggtatctg cggtagaaca tatgaaagaa gcagcaccga ctgttttagca aaaacacagc 360  
actctgcag 369

<210> 1279  
<211> 362  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-024-Q1-E1-A12  
<400> 1279

ggcatattaa aaatactgca gtcttgtaga agctttcttt ctccttgtct tgataacaaa 60  
cgagagagga atgaccttga ataaacgact ccactttttc tcacttgaaa aaaaaaaaaa 120  
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180  
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aacaatacgg aaatactaaa agaagtactc 240  
gatgaaaaaa gatacccaac ttaatgagag acaatggacg ataatgaact acgcaaatag 300  
atatggtatc tgctgtataa catataaaag aagcagcacc gactgttttag caaatacaca 360

<210> 1280  
 <211> 413  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-024-Q1-E1-A2  
 <400> 1280

agctcttttc tgttttggtg agagttggtg cttggagact aagtcataac gatcctcata 60  
 taaagttatt cttccataat gacaccaact tgtagtatac atagactcct gaaacagttc 120  
 atcgctggaa agtattaccg gcagggttgg tattaagtcc tttactggtt ctgggcgggg 180  
 aatatttggt atcaacatat gatgcaagac aaagtacaaa tgagacatca atacgtttgg 240  
 cgcttagttg gagtgtttta aggtggcgtg tttctgctca cttgattggc acatagatag 300  
 cattcctttt agcagctatc tttgcgtaat gtgggaaact ttcagtcggt atgcttaggc 360  
 atgactttta ctatcactgt atgggtagtt atcaccctc cgaagtccta aat 413

<210> 1281  
 <211> 450  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-024-Q1-E1-A7  
 <400> 1281

cgccggcagg taacgggtcaa ggggtcgagg gacgagtcag tttcgattgg aaaaaagccc 60  
 aactatgcta tcttggtcc cataaacctc gcgtgttctt tctcggttg cttttgaac 120  
 ctaaattgta tagagtcacg aataacatag aacagtcatt gtctctcaat gtcttccctt 180  
 gtctgactgt agtttttctt tggttttgca agtggtgaag gacatagcta cgtgctgttg 240  
 tgactgcttc tttcgacatt gtttttttca ggatacatct tgctgtacat tttttcatgc 300  
 atacctagag acttacactg gtagctacca agttaaagc acaggtcgat acaagtcaaa 360  
 ggactagac aaaaccgcta tctacttttc cttcaacgat gcgactagaa agtgacaagt 420  
 caatttgcaa gtggtagttt tgcaactgcg 450

<210> 1282



<211> 440  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-A8

<400> 1282

ggggccaacc aagcctccgg cttggccgag gaaaaggatc ctcttggtcc ccaggttggt 60  
 ggagtgggtt cctgcacttt gggaagggaa acaacaagca ccaattactc aaagaattta 120  
 aagttacact ggataactag acactggata tctttgaaaa tgagacgtca ttcttcccca 180  
 gaccaccaca ccgtaaagtt gcctctccgc atgatgaact cggagaacaa gacgcgaccc 240  
 cgttacttgc aggagttgcc tttgattcct atcgacgagc tatactcgaa aagttttcgt 300  
 tggaatcgaa ttggttgcta tgccgtgtac aacggtgacc aagcactttg ttatgtacgt 360  
 tacaacatac acttgcaaag aaagattgcc tttcacgcca tgttgcaacc agacaattgc 420  
 aaatttttca gaggctttgt 440

<210> 1283  
 <211> 430  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-B1

<400> 1283

cccacgcgtc cggaacgttg gaatgaatat ttagattggg ctgtgaaagc ttttcgtctt 60  
 agtacggtcg ttgcagcacc caagactcag attgtcaccc atttatgtta tagtgacttt 120  
 caagatatcc taaaagccat cgatgagatg gatgccgacg tattaaccat tgagaatagt 180  
 cgtagtgatg atgccatggt gcgtgccctt gccaaagtat gttattcacg tgatgtggga 240  
 cctggagtct atgatgttca ttcaccggct gtaccgagca tcgaattttt gaaaaagaaa 300  
 atggaaggct tcaaaaagtc tggattcctt ttggaacgct tatggattaa tccagactgt 360  
 ggtttgaaaa cgagacaatg ggaagaagtt attccttctt tgagaaatat ggtggatggt 420  
 gctgtgcaat 430

<210> 1284  
 <211> 426  
 <212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-B10

<400> 1284

agacttgttag ctgttgtgggt agttttatcg agcgtatgtc aagatggtga agaactggta 60  
aagctactgt tgacgaaact ggagataagc cagtctttgc gtaggaaatg tttcgcaaag 120  
ttttacgagt tgctaactcg aggcgtatta ctggaagctg gtcttttgca tgtcctcttg 180  
ttgggtatttc caacttatcc atcgcatctt tatgatgttt tccataatgc tgaagatgta 240  
gttatgttat tgtatagaca aatgcgttgc catgagaacc ttattgacct gcagagttgt 300  
tttctaactt ttttgatgaa atggattcag tactttcctg aaacaactga lgtgggtacta 360  
aaaattttca agcgttatgc aacccatcaa gatcttgaag tacagaaccg agcatgtgaa 420  
tatatg 426

<210> 1285

<211> 411

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-B11

<400> 1285

gaggaacgat gaagtggcaa agcggtccta ggaatacaag tgttaatagg atacaaacgc 60  
tactgctttt cttgttgatt atttgcaacg ttttcccata tagttactct atacaatttt 120  
atatgaacgc tggaacgaag cgttgtcttt cggaagaaat tacctcaaac acaaagggtgt 180  
ttgggtgaatg tctttagtgc ggtgcggaag gtcctatgtc cgtagatctg ttgattcgag 240  
gacctcaagg ggagactata gtgcaacaga agaacataga taagcagtca tttagcttca 300  
caacaccaca gcacgttctt gctggagatt cgagtttggc ttccaacgat attcactggc 360  
ctcctgcaag ttatcacttt tgtttogaag ctagtcctct tegtctctct c 411

<210> 1286

<211> 435

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-B3

<400> 1286

cgatgacttt tgtgtgaaat agtaaagccg ttgagatgca gacctttttg gataagacgt 60  
gtgagacgac atcgacgttt atatagtaga gcttttattg ttgccaaactt tttctttctc 120  
tttgacgttt tttatacgct ttcttccagc agtctgtact atcatagata tcttcacagg 180  
agtagtgtca cgaataactt ggtagcaacg agtaggttgg tagctctagt gtcgtcaggt 240  
tggggttttag atcacttgct ggatattcct agcgctgcct tgaatctcag aagtgtcact 300  
gctttggaca gtctttttaga gtctgtgaac aggaatagag attggtcagt aagagtagta 360  
ataactcatt ttatgggtact gaagaagcca gatgtgaata caatgacgtt gttgttgcac 420  
tgtcccacaa gtaat 435

<210> 1287

<211> 437

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-B4

<400> 1287

cccacgcgtc cgccggacgcg tgggtttacg attcatgcag gtgtattggt gagatatggt 60  
ccgttgactg ccaatcggtt gacaggtatt gtctcccgag gaggatccat tcacgccaaag 120  
tggtgccttg cacatcataa ggaaaacttt gcatacgaac attgggatga aatttgtgat 180  
attatggcgc attatgatat cgcattttct ataggagatg gtcttcgtcc tggaagtatt 240  
aaggatgcca atgatgaagc acaattcgcg gaattatata cacaaggaga acttacaaga 300  
agagcttggg aacatcatgt tcaggtaatg aatgaacgac ctggacatgt gcctttgcac 360  
aaaattccag agaatatgca aaagcagttg gattgggtgtt cagaagctcc gttttatact 420  
ttgggtcctt taactac 437

<210> 1288

<211> 438

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-B6

<400> 1288

cggaagagac tacacatgag tagatattgg acgttggaag aacatgaaag gttccttgaa 60  
gcaagaaaga tatatggtac tagagataca aaatctatag cagagtatgt gggcacaaga 120  
acagttactc aagtaagaac acatactcaa aaatttgaaa agagggttga gttggcaaga 180  
agaacgggag gaccaggggtt tcgtgttcgt tccaaaaaga gtagtcaacg caactggaga 240  
aatagggtgtt ttgtagacaa ctggagaaac ttacacgata gttgcttgag ttcgaatagt 300  
agcagtgtta ctgtccaaaa aaatgaagaa gacacacaac ctgctgagta tcatgcggat 360  
atccatagtc catcttccat tcaacaaaca gatatgtgct caaacactac tgctgcagaa 420  
tcagattctt tcgagctc 438

<210> 1289  
<211> 442  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-024-Q1-E1-B7  
<400> 1289

cccacgcgtc cgcccacgcg tccgcttggt cgcattgtgg attggagagt tggtagacgtt 60  
gcactgcgat ccacgacaac caaaagaaca agaaagaaag aaacaaaatg ggatgggtgga 120  
tactttctcg tctcctttct cgtgtacgtc gtagtggctgc aatggacgat gcttgttcat 180  
ggaaaagcca aagatatttt agtcgtcgag cacctagaaa gaagcaagta gaggatgac 240  
tcttcgacaa tagcgtaaaa aaagaaccgc gaaaactttc agaatttaac ctttatatga 300  
agaagatgtt gcctgtgatg aaacaacaac atcccgaact gagccatcgt gaagtattta 360  
aaatgtgcgc tcaaagttgg aaacatgcca gtgaaaatcc aaagaaacgg agatgagtg 420  
tgtttgtagc tacgctttcg ta 442

<210> 1290  
<211> 439  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-024-Q1-E1-B8  
<400> 1290

gtcggccaag gcgtccgata actttggtgc attattgcca gtgacagtag aagaaacata 60

acaagtccaa acttttttga ctcaattttg atttctatct aaactggcat tgtaaataga 120  
 actcagagtg tcaagttacc ccttttttga ggaagagagt gacaatgggg ttgcgttacc 180  
 aaggcggcat gtctacgcag tcgtcgacac aagaaaaaaa gaccaggtca aaaaaccgaa 240  
 tgtgactcga taaagagtaa acaagcgtag ttcttgtaac gtagcagccg ctgattcctc 300  
 ttttacatag ccagctgttt gtgtcatcgt ctcttgcgta gggtggctcc ggtataacaa 360  
 ggccacaaaag ccaatcttgg aatcgctcgc gctttatgcc gattgatgat tcaagtttat 420  
 tttgaaagaa aaacaacgc 439

<210> 1291  
 <211> 384  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-024-Q1-E1-B9  
 <400> 1291

cccacgcgtc cgagaatatc aaaagagatg gaagaagagc actgttcttg acacttgcaa 60  
 gctttattgt agcaatcagt tttttccaag gtcgatagtt aacactaaac agtcgatgaa 120  
 cagcacttgt ttatgtccta cccgtaagct aaggggagaac aacggaaacg gtatagtttt 180  
 ggtaaactgt gggtctttct caccataaac acttgacat cttctgttaa tggaatctgc 240  
 gcacaatttt gcagtttata gaggctttca agttctaggc ggctacttat ctcccgttca 300  
 cgactcttat cgcaagacag gtcttatcca tagtagacac cgcctagaga tgtgtcaact 360  
 cgccgtagag gactcttctt ggct 384

<210> 1292  
 <211> 441  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-024-Q1-E1-C1  
 <400> 1292

agttgcggtt gacgtggggt agtgggtcaac caagagtcct tgggacacaa actatgtcca 60  
 caacttcata agtttgtaaa gtttgagtac ttgcaatgag ctatctagta ggaaataccg 120  
 aacaagactt acaagccaag aaaccaacat atgaagaact ggtggccgaa ctatctcaac 180

tcaaggcgga tttattcgca gaaagacaca aaagaaaggt agttgaacaa gagttgaaag 240  
 agttgaaaca gttgtcgttt tctatgcaaa ctcatacgga ggcagaagag gagtatattg 300  
 cgaataaact cataaaacgg ctcacagagt tgaaagagga aaaggaacgc ttggctgtgc 360  
 aaatagagca agaagaagag tatttgacga ataatttgca acaaaagttg gaacaactac 420  
 gaagagagaa agtaaattatt g 441

<210> 1293  
 <211> 434  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-024-Q1-E1-C10  
 <400> 1293

gcttgacgta caaaatctcc atctacagtg tgtcgtaaag ggtctgagct ttactattct 60  
 gcatatgcaa agctcagtcg caatttctac tgttcatgga ggaagattca cgcaacagta 120  
 acgtcttttt ccgactggac ggaaacaagt ttcggagagt ggctttattg ggtgcaaaag 180  
 gggtcgggaa gtcattccatt gctaccgct ttgcagaaga cacctttttg gactcgtaacc 240  
 ttccaacat agaggattcc tatcacgcga cttgcagaca caaaaacgaa acttacaact 300  
 tggagatatt ggacactgga ggacaggacg aatattccta tctcggaaca cagctgacta 360  
 tcggagtaga tggatatgtg tttgtttatt ctatttgca cggtgcttca tttgatatga 420  
 ttctgttgc ccat 434

<210> 1294  
 <211> 355  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-024-Q1-E1-C11  
 <400> 1294

cccacgcgtc cgcccacgcg tccgcccacg cgtccgaaat tgtgggagag cgagttttgg 60  
 gtattttgtg tcctcaagca gtcattgttg gtttctacc gactatatca actgtttccc 120  
 cctaggacaa agtgaaagtt gccactgttc ccacgtatct aaatacaggg taattataga 180  
 aaatagtgtt ttttgaaag agaggtaacc atataaaaca aaggttgggc agcgttttgt 240







<212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-024-Q1-E1-D10  
 <400> 1299  
 aaaatgtctc aggaataacca gctcacctac ttcaatattc gtgggttagg cgaacctgtt 60  
 cgtctactat ttgaagacaa tggcatcaaa tactcggaag agagggtaga agctggcgag 120  
 cagtggcaaa aactcaagca agaaggtgtg tttcaggca agatccccctt tggtcagatg 180  
 cctgtattgc gcgatgggag catgtattta gcgcagagtg gtgcaatact tcgtcattta 240  
 gcgagaaaac ataacctcta tggagacacg gaagaagaga aagcgttggc ggatatgac 300  
 aacgactttg ccaacgatct tcgaactccg tacgtgcgca tgatttacag tgatacgtgg 360  
 aaggagatgt tacccgagta tttggaaacg gcgaag 396

<210> 1300  
 <211> 413  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-024-Q1-E1-D11  
 <400> 1300  
 cccacgcgtc cgcccacgcg tccggtctca acgagtactt tgcagtcgca tttgtgtttt 60  
 gtatttggat ttcttgttcc atttgcaagt ccaaaaaggg tatgacattc aagagcatga 120  
 gacaaaatgt tggcagatga taacaaaact tcagaaggat acttcagaac aggttcgaag 180  
 cgaagttatc gcaactgttc gatggattaa aaacaagtcg ttactagaag ggatggttcc 240  
 atgggttggtg gaaaccatga aaactagcac ttcgtcta at gaacaatatg cagctgaaca 300  
 gactcttcga aaattgtatc aaaaagggaac acttttaacg ctttctctag gcgaaggaga 360  
 gaactcttgg attaccagca acatggcccg tttgcagttg gctgtaggtg aaa 413

<210> 1301  
 <211> 265  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-024-Q1-E1-D12  
 <400> 1301

ggcaaatacg ggaaagcagt aaaagaagaa agagaaagga aaaaactgag tatcaggaag 60  
 aaaagagggga gtagatgagg aaagaaagat caaggaagta agagtaagag aaggagtaat 120  
 gtgaatgaaa gcaggaaagt atttgaagaa gagagtgtaa agcgcggtacc ttttgcataa 180  
 tgtcccagcg agtgaaagag gaagcaaaaa gaaagaaaaa gaagtagcca ggtaagaccc 240  
 gaagctagtt gatcttatgc tgtcc 265

<210> 1302  
 <211> 432  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-024-Q1-E1-D2  
 <400> 1302

ggaagaacaa aaagacaatc ctaataagac cgcttccgtt gtttctgaac aagacaacca 60  
 aagtgaaaaa gaacaagata caacaacaac tgttcaagaa gagcaacaaa agtacaacaa 120  
 taataacaac aatagtgaga actctacagt ccttggtgaa gataccaagt cccaactagt 180  
 gagagccttt gcggatgtta ccaaggtttc gtcttctcaa gtaatgcaa gctctgcaag 240  
 aaactgtttt acaaactatt gattgggttac taggctgaag aatatcttga aaacgccaac 300  
 tgggagctac aaacagcagt acgacaatac tttgataaca acgagaatgc gactatcgga 360  
 gaaagctctg tccctactgc ggatagtatt gcagcacaca ttacagaaat aagaaagaaa 420  
 gcaagtgaac tt 432

<210> 1303  
 <211> 222  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-024-Q1-E1-D3  
 <400> 1303

gtgcactaca aatattccca atccaaaaaa taaatacgaa aatactcaag ctttatttaa 60  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120  
 aaaaaaaagg gagggaggag ggggggaagg aaagagggtt aagggggaat ggaaggtgca 180  
 agggacgtta ggggtgggcag taagggggaa tcaattggcg gg 222

<210> 1304  
 <211> 319  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-024-Q1-E1-D4  
  
 <400> 1304

cccacgcgtc cgccccacgcg tccgattctt acctgaaacc aagggcttta cattggaaca 60  
 aatgagagtc gtgtttgagg agggtttatt caccatcgca gcttatcact gtcgtgctgg 120  
 ttggagaaca cttcgtaagc ttttgggact tccagttcca gacactcctc ttgtttctcc 180  
 ctatgataag gcctacgcta ttgaccgcgc taagagagaa gaagagatga tgcattgctgg 240  
 cgaagtggcc aagtaatgct tgacatgatt tatattgaga tggtagtttg aaataaacat 300  
 aaatcttgct tggttatgtt 319

<210> 1305  
 <211> 429  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-024-Q1-E1-D6  
  
 <400> 1305

ctcaagtgga tcatcccacg ttggtaaaga tagacttgct tcaaggcagc tttaaagtac 60  
 tccaagactg tgacagagat ttagaatgtg atcataatac caagtttcag ttggaactta 120  
 ttcagtatgg tctcttttca cctgggtttt ggacgagaga aaatgttctg ctcttctatt 180  
 tggagctcgt gtcagggtgta ttcataaggg acactctcta ccttttctac aacaaagggtg 240  
 aagaacatgt gtttgcgagt ttaatgctgt tgttggagac acaagtttca ctgtatgcag 300  
 acataaaaaac aaactgggag aaacgacact ttatcgtttg cctcatcgctc aggtctttgt 360  
 gtgaggaata tcaacgacag tattcagagc tatgttcacc gaatgaaagc acgaaagata 420  
 tgctactag 429

<210> 1306  
 <211> 422  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-D9

<400> 1306

gggtattgga gagagattgc ttgttgaaag aggcaagttt gaagtatgga acatgtatcg 60  
cggcgggactt cacgatgttc tttggacttg agtacttttag aggagtcaca aaaggagaac 120  
ctaaatggca aagagataga ctgtattcta acacctgaaa aaagaaccat gccaccttcc 180  
atatccacga aagaaataga aaatgttctc aaccttttcc tttcttatga tcaagataaa 240  
gatggtaaaa tcactatcaa gcagcttaag gaattattat cgtcgctttt tactcaagaa 300  
agaattggaa agatttatctt cttcaacttt ctgtagatag tttgtatgat agtgggtatta 360  
tagactggat tggttaagcaa cttgaagcgc ggtcgattcg tcgctaactt tggcattttt 420  
gt 422

<210> 1307

<211> 418

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-E1

<400> 1307

ggaaaaagag agaggcctcg ttgtccttgt cttatggaag cgtctcagcg atggactggc 60  
cgatatatcc aaaagtcctt tctcacttat ccatcacttg gacagttgag tagtaaattg 120  
cgccactttt ccacagcacc ttgggtacaa gatacttttg aggaatattt tacgtttcct 180  
agagagagtg aaagaaataa ctacgcagtg aattggctcg tggcaaagat aggagtgcct 240  
ccaaagggtg aagtttttta caacgtgcct tcgaggacga ttgttgccaa ctcgcctgga 300  
aagcttagcc gtgagaggag gcacttggtg gtcccccatc aaaagacggg caacttcag 360  
gaatttgtcc taggaaataa cttgaaaccg agagaatatg caaaagcctt gaaagctg 418

<210> 1308

<211> 415

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-E10

<400> 1308

accttacctc tccaagaagg tgttgcacgg ctgtcgaaag aacgtgctgt gaagtgaagag 60  
aacgtacgag aaagccaagt gagggaaaaga aggcaagtag agggcggccc gagaaaggag 120  
agggcgtaag acgtgataca gagtaggaag aaaagagaag agagctagaa aggaggtaaa 180  
agaagagtaa aaggactaga agaggtacgg aattcacgag gaaggagcgt gaaggaagga 240  
ggaatcccaa gtaatcgagg aagaaaaagc ttcggtgaaa gcgtgaacgg attttgtaca 300  
cactgcccgt caagttctgg aagtgtgcta ggaataagca ggagaagtag aagagagtag 360  
gaaaagaaga aaggaagtga agacgtaaga cgtgaaaaaa aagcgtatga ctggg 415

<210> 1309  
<211> 414  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-E12

<400> 1309

attattgaaa tgatcttcgc acgtatcaca acctgactat acaatgtaca gttcctatatt 60  
gaaaagttac tcacagtttg ttttattcgc aactgtgttt gtatgtcttt tcgcacgagc 120  
ttgcaatggg agaacgtcag aaagtctaga ttggctcggg ttaggagatc cagagtttgc 180  
gagtttcaac gggcgctttc caactttaag tgatttgaag cgtttattct tcgaattagg 240  
ggaaaattta gcggaaagaa tagagttatt gggttctgta actcaacact ctagtcgaaa 300  
gtttctgaat agaccatttc tttcttgccg aaataggaaa gcagccaatc ttatcaaggg 360  
ctgggttagaa gaggcaggct gctataacat ttctatagat ttgggttggt atgt 414

<210> 1310  
<211> 426  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-E2

<400> 1310

gtcgtgtacg aggggttggtc atttgttgag ctgaagagtc aatgaacaag cttcagttgc 60  
tatacgtaac caaacaagct gtttcaaaag catggcaaag agaacagaaa aggttatact 120  
ccgagaagaa atcagttgca gaaggaactt tgggaagcag gtggaaggaa agagaaactg 180

cacaagagag cgcgtacttt aatcgtgaag atgatgcagg cagtacaaag gtttagcagcg 240  
aaacttcggc agcatattga gccatcggat gaagtactcg cccaacaaag aaaaggcgtg 300  
gcagaaatct tacaaaagca cgggtgtccag cctaatacaa gtttgattga agatattgtc 360  
cgtttctttc attaatctct ccgtgtttga tgtttagctg ctgttcaacg aaagttttgt 420  
ttggga 426

<210> 1311  
<211> 397  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-024-Q1-E1-E3  
<400> 1311

cggacgcgtg ggcggacgcg tgggcggacg cgtggggggc aatgtacagg gaagtatgac 60  
ccagtaatga ggagtggagt aaacagaaaa ggaagtaaaa ggagggaatg aaggggaagtt 120  
atggcaaaaa cacgtgccag cagcagcggg aaaacgtgtg tagcaagcgt agagcagaag 180  
aactgggtgt aaaggctcag tagtagagta agtgtaaaag ggaaaggaaa ggagagaaaag 240  
aggaaaggga tgaaatgcag agatctctag agaaaggcaa gaaagaaaag aaaggaagac 300  
acagtaaagt aggcgagaaa gcataggaag tgaaacggat taggaacccg tgtagtctat 360  
gcagtaaaag aaagaatgag taagaaaaaa gggagtc 397

<210> 1312  
<211> 226  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-024-Q1-E1-E4  
<400> 1312

cttcattgga aaaggaccaa ctgggaaagg aagctcagtt gcatcaggat agtgcctaag 60  
aagaagcaat gttggttggt tgttgatgtg ttggtggtgg attgtgtaca tatatagaga 120  
gagtgtgtgt gagagaaaaat gctttgtgag tgaccactcc tcaaaaggca gtgtgaacaa 180  
atcctcacia agcaaaagag gaaaataaaa gctctttggt gatttt 226

<210> 1313  
 <211> 444  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-024-Q1-E1-E7

<400> 1313

cggacgcgtg ggcgtcaaca acaacaggaa attcattgat ggacaaacct caagtggatc 60  
 atcccacgtt ggtaaagata gacttgtctc aaggcagctt taaagtactc caagactgtg 120  
 acagagattt agaatgtgat cataatacca agtttcagtt ggaacttatt cagtatggtc 180  
 tcttttcacc tggtttttgg acgagagaaa atgttctgct cttctatttg gagctcglgt 240  
 cagggtgtatt cataagggac actctctacc ttttctacaa caaagggtgaa gaacatttgt 300  
 ttgcgagttt aatgctgttg ttggagacac aagtttcact gtatgcagac ataaaaacaa 360  
 actgggagaa acgacacttt atcgtttgcc tcacgtcag gtccttgtgt gaggaatatc 420  
 ancgacagtt atcagagcta tggt 444

<210> 1314  
 <211> 421  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-E9

<400> 1314

cgaatgtttt cgtttctcga aaaggaaaaa cgctctatta ggccaaagtg aacgactagg 60  
 atcttctgca agtgcagtgc aacttgatg gcgcggattg ggatgataat aatgagcgcg 120  
 agacacgcca caaatattgt ccaagataag cagttacact tgtgacacag tgaaggttca 180  
 aggcaaccga ggacagactc tagttctcga ggtggaacag gtgcctgggt ccgtcgaaaa 240  
 aacataatta tcccaaaagt ctggaattca aattggctag gtatcggaag agccacaggc 300  
 acttgctata caaagagtcc ttccggctgt tggcgtaag gccatccatc tctcttgtgc 360  
 aaggacgttc atttggggcg ttttggtggc ggtgcaccgc atataaaatt tcttcaagtc 420  
 c 421

<210> 1315

<211> 443  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-F1

<400> 1315

gcggcgctcat aatagaaatc cgaaaggagt agaagaaaag agagagaaga aagaaaagaa 60  
 gagaaaagcc gtactgaaga ccgacacagg tactcgagga gaaaggagac ccaaattaag 120  
 gtgagagaat ggacgataag gaactaggca aaaggatatg gtatctgcgg tagaacatat 180  
 gaaagaagca gcaccgactg tttagcaaaa acacagcact ctgcagaaaa gagaaaatgt 240  
 aaagtataga gtgtgcggcc tgccaaatag tagagaagaa atcgatgaaa gtgaaagcga 300  
 gtaaaagatg aggtatagag aatggcggtc ctaactgtaa ggatccaaag gtagcgaagt 360  
 aaatagacgt ttgaaaggcg tccagtatga aaggagaaac gagtgtaaca ctgtctagtc 420  
 gtccaactca gcgaaacagc aat 443

<210> 1316  
 <211> 429  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-F3

<400> 1316

cccacgcgtc cgaattaaag tagttgtttt atatttcgct gatatgcctt tgttttctcaa 60  
 aacatattga aagcttttga atgtgttaaa gagactgatt tttctttatt tttgttttcg 120  
 tgctagaatt tgtttatggt tccgtgttgt cgcttttctt ctattttctaa aggacaagcc 180  
 tttgaacacg ctgtgttggt gtatctttcc tacttgggtt ttttcatacg tagtactgga 240  
 ggagttggtg acggcgggtat cgactttcgt ggaacttgga aacctaataa agcaatagag 300  
 cctgtacctg tcgtcgggtca gtgtaaagca ttatcaggaa aggttggtgt tcacgttatc 360  
 agagagatgg aaggaatctt gtgccgcgaa gagcctggta ccttgggtgc tatagtgagt 420  
 gagaagggt 429

<210> 1317  
 <211> 385  
 <212> DNA



<213> Cyanidium caldarium  
 <223> Clone ID: LIB190-024-Q1-E1-F4  
 <400> 1317

cggacgcgtg ggggccagtt tcctcaggag ccaatgaaga aactttttgt caaaatatta 60  
 tcttcgaagc tgatagtatg gaggaatttt gcaacaatta tttcttcgct tctacaagtt 120  
 ctttgggcct aggatgcctg aaacattgcc tcagaagggtg cgctcacctg gattgtctgt 180  
 cagaagacca aggggaaaga cttacaccag agtacacgtc taacgagtgt actgttcaaa 240  
 atatttgttt ccctgagctt gcaacggaga tatctcaaga tgaagtttta gagaactatc 300  
 tagttgatga ttaccccaat agttccaacc ataattttgt gatcgaaagt tggcgttcat 360  
 tcacaaaaga tgatttttctg ttgtc 385

<210> 1318  
 <211> 418  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-024-Q1-E1-F5  
 <400> 1318

cggacgcgtg ggggtggtgga ggaggacgag tcgacgaaag atcggttgga tcgctacggc 60  
 tattccgaga tattggaaaa cctatgggaa atggagagtg gagaacacta tttgttggtg 120  
 ttccaaaaga gatgaacacg aagaagatat tcttggaata ggaaatagta cccgaatgac 180  
 gagacctcaa ccacctccac cggaaggttg ttgtggcaat ggttgtcctg actgtgtatg 240  
 gacggtttat ttacgacaac tggaggaata tgaagaagaa caaaataaga gaaaaaaagc 300  
 acgagatgat agataaaaag atattcacgg gtatggctgt ccaacgcgcg gcatattttc 360  
 caggatggat aaaaaagcca acgaccacag aaaaaataa cacagctatt cgtgcgct 418

<210> 1319  
 <211> 450  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-024-Q1-E1-F8  
 <400> 1319

gggccaacca agcctccggg ttgtatggaa ccaattaccg gaaaatgtta tgaaggcggt 60  
 aacggcattg tttgaaattg gcccggtttt ggtaaaagg ttttgggaac cacgggcgga 120  
 tggctctgtc caacaaggat tggttcccaa ggttgccaac caattggcct tggaaatggt 180  
 taatggggca tgtaaacttg ccaaaaatga taacttacac tttgcacaac tccgcaatca 240  
 agtcgaatct cctgcgggaa ccacagttta tggtagatca gcgttggaaa atggacaatt 300  
 ccgaaaggca ttgattaatg ccattcagga ggctgtttta cgtgcaaac aactttgatt 360  
 attcttgtgg atgatcactg tcattattat tattgttgtt gttgttgttg ttgtcatgat 420  
 gatcatcaga atgtggatga tggatatgaa 450

<210> 1320  
 <211> 406  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-024-Q1-E1-G1  
 <400> 1320

aggacagcca atagcagatg gattgaagtt aatgataaaa gagggagtaa agccaacaag 60  
 agcagaggga atgatgtata aagcagggcc agtagtaaca tggatgttat cgatgctagg 120  
 atggagtgtg gtaccaatag gagaaggaaa ggtaatagtg gatatagaag tgggaataat 180  
 agcatggatg agtataggat cattgggagt atatggagta ataataggag gatggggaag 240  
 cagttcgag tacagcataa tgggaggttt aagaagtga ggcagatgg tatcgtatga 300  
 attaggaatg ggagtaatga ccctgtagtg acaccttggtg gacacttgta ttgttgggtct 360  
 tgtatataca agtggatggg tgctcatcct gaatgtcctt cctgtc 406

<210> 1321  
 <211> 419  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-024-Q1-E1-G11  
 <400> 1321

cccacgcgtc cggagcgcta ccggtgcttt tccatcctcc gaccacagca accactcctc 60  
 tagttcgct caacgactat tacaacaaat ggaataccaa aatggatgg aagataaaga 120

aaacgaagca cgtcaagaaa tcacgcgacac gcacataaaa gtgatggatg gcagtctcaa 180  
 gtccaagatt tcttcttgtt cacaggacaa caacgatggc aagaacatga ggaagaaaga 240  
 ggcaaatacg ggaaagcagt aaaagaagaa agagaaagga aaaaactgag tatcaggaag 300  
 aaaagaggga gtagatgagg aaagaaagat caaggaagta agagtaagag aaggagtaat 360  
 gtgaatgaaa gcaggaaagt atttgaagaa gagagtgtac agcgcgtacc ttttgcata 419

<210> 1322  
 <211> 447  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-024-Q1-E1-G12  
 <400> 1322

cagtacggtc aggattccgg gtcaccagcg tccaccagc gtcgaatacg agagcaaaac 60  
 tgtcaaaactg gtaattatgg ataaggaatt ttttgaagta gacacaagca tggtagccct 120  
 ttcggaacca ttaaaaaccg tctgggaaaa tacggaggat acagaaagaa taccctgtgc 180  
 aaaggtaaaa ggacaaattc ttgcaagggt tatcgaatat tgtagatctc acacactctt 240  
 aaagaccatt ccacactctg aggatgatat tgagcgctga gatagggaat tcctaagtgt 300  
 atatcaacca cccctttaac atttgattct ggctgcaaac tatttggata tcaacatctt 360  
 gttggatata acttgtaaac gagtagcaga tatgatcaga ggcaagacgc cggaagaaat 420  
 aagaaaagag tttaatatgt taaatga 447

<210> 1323  
 <211> 436  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-024-Q1-E1-G2  
 <400> 1323

ctaggcaaaa ggatatggta tctgcggtag aacatatgaa agaagcagca ccgactgttt 60  
 agcaaaaaca cagcactctg cagaaaagag aaatgtaaa gtatagagtg tgcggcctgc 120  
 caaatagtag agaagaaatc gatgaaagtg aaagcgagta aaagatgagg tatagagaat 180  
 ggcggtccta actgtaagga tccaaaggta gcgaagtaaa tagacgtttg aaaggcgtcc 240

agtatgaaag gagaaacgag thtagcactg tctagtcgtc caactcagcg aaacagcaat 300  
aactgtgaaa atgcagtaaa ctagcagtag gacggaaaga cccaataatt cttgactaga 360  
taggtttagg gaggagagag aatcatgaag tanaggaggt ggggtaagag atgaaagacc 420  
actgcatgag gataag 436

<210> 1324  
<211> 421  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-024-Q1-E1-G3  
<400> 1324

gtgggttttga aatgtggtct ttccactctc ctgcaagagt ttcaaccctg cataaaagcc 60  
aggagacttg ttttctttcc aaggacccta tggatagtga gctggaatct gttacgtttc 120  
taggaaatat taaaagacag acacgccgtg tactgagaaa aggcgctgct tctttgtttc 180  
cctatttgca gtcgtctgtt ccaaagcttc ctacgaaata tggggctttg gttgcctgtg 240  
cagtcaagtc tctcatagct gccttgattt atatttcagt atccgttagc cttacggtgt 300  
ttaacaagtc tatttttcaa aactatgact ttcaagaaac tactgttctg gtctgtagtc 360  
aactttccct cactattctt attttgtttg ggcttcaaag aacagagcga atttcgacga 420  
g 421

<210> 1325  
<211> 435  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-024-Q1-E1-G4  
<400> 1325

cccacgcgtc cgcccacgag tccgtgatga cttttctttc aggtatttta agagttgcat 60  
ggatgtcaca tccttatcgt ggagactcgg cccctaagcg catcgtgatt caacatctgg 120  
tgacttgtaa aaattcgagc gatattttca taggttccgt agatattcgt gatttgaaga 180  
gtgaagagag tttgattgct tcattatctt ttccatcagg tacagcggaa gatgtttctt 240  
tggcgtctca ctttcgctgg ggactattga atagtggacc ttgggagaat ctccaacca 300

tttcttggtt cttttcaggc tatcgaatag gtcattctgt gtcattctcat gacttgcctt 360  
 gtccctcggtt ggagattatc cgcaaagtgg tgcataaaag ggatggaacg aagatgatag 420  
 aaatggtggc ttcgt 435

<210> 1326  
 <211> 432  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-024-Q1-E1-G5  
 <400> 1326

cccacgcgtc cgcccacgcg tccgggtcaaa atgagatttc cacgaaccga tggatagctg 60  
 ttttaagcga ctccacaatt atgattgacc tcacaaccaa catgaacggt aacaacaacg 120  
 atactgatgt cgcacttggt gaatcaagct tccctcgagg ttctgtcgaa tatattatcg 180  
 agagggacat cgagagaaag ctttttaagt gggcgaatat gaatgcgaca cacagtgcgc 240  
 caaaaaactt cccttttctt gacccaactt ctcttgact tgcaggattc agtgctacca 300  
 cgtttatatt gagtgtattc aacgcaaatt tattgccttc ttccatatca agtggcgctc 360  
 ttggtgcagg atttttctat ggtggagcca ctcaattgat tgctgggtctg ttgtgttttg 420  
 ttactagaaa ta 432

<210> 1327  
 <211> 441  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-024-Q1-E1-G6  
 <400> 1327

ggcccacgcg tccgcccacg cgtccgccc cgcgtccgcg cgtttggatg tcatggtgat 60  
 gcccaattta tatggcgata tactcagtga tttgtgtgct ggtctcatag gtggattagg 120  
 actaactcca tcaggaaata tgggacaagg ttgtatgttg gcagaagcag ttcacggcac 180  
 agcaccggat attgctggaa agaatatggc caatccaacg gctctcttat tgagtgcctt 240  
 tatgatgggt cgtgaaatga agctgtttga aaaagcagat atagtagaaa ctgcagtgtg 300  
 tgatgtattg agagaaggaa aggttcgtac cagagacttg ggaggaacgg caacttgtac 360

agaataaaact ttggccatta tcgataaaat tcagcagcgc atttctttcc ctaataaaat 420  
atgagtcaag acgacgaaca c 441

<210> 1328  
<211> 435  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-024-Q1-E1-G7  
  
<400> 1328

gtcatttata ccgaaaatcg agtggcacgc aacgcattgc ggtttttacc gtacttttgt 60  
ggtgtttcag gggatacgca atttgctttg actcagttgt tgcggattc cgagtttgtg 120  
cagaatttta ttcgtgaaaa taccacagcgc ctgtatgaaa cgtatagcgt tcattgtagt 180  
tgtttgaca aattgggtat ttccatgtt cctagtgaag caggtttctt tatttggatg 240  
aatttgaacc catggatggc atctcatact tgggaaagcg aacgagagct ttggcgtcgg 300  
ttgttgata aagccaaagt cgtccttaca ccaggtgaag tttgtcatag tacagagcct 360  
ggatggtttc gttgttgttt ttccgcagcg tcctcggaag ctgccaaagt ggcttggaaa 420  
cgagtggaac aatgc 435

<210> 1329  
<211> 359  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> unsure at all n locations  
<223> Clone ID: LIB190-024-Q1-E1-G8  
  
<400> 1329

aagcaagcct ccgttaagaa agaagggaaa gggaaaaaaa aaaagggttag gtttaaaacc 60  
acaaacccaa aagggaagc ttaaaccat aaagaaaga aatccaaaaa gaaggagaaa 120  
agggttaagaa agaggaccga ttcagggtaa aaggtanagg agcaaganga gaagagagaa 180  
tgctgggtg attaccgaaa caagagaagg gaattaaaag gtaagaaaga ggaaaggttt 240  
acaagagaag gaagtacaaa gaagagagtg taaggcggcg tcataataga aatccgaaag 300  
gagtanaaga aaagagagag aagaaagaaa agaagagaaa agccgtactg aagaccgac 359

<210> 1330  
 <211> 424  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-G9

<400> 1330

cccacgcgtc cgcccacgcg tccgttaaact actaacttgg ttgcttagta aatttgcattg 60  
 ttatgaagaa gctattcaaa accccaggaa ggatgttctt ttcttaacca agacttttca 120  
 aagtgagttt caccgaaagg ccatatggct tgcagaagac ttttgtggca ctgcagctat 180  
 atctcgtgaa tttatccgat cagactttga aagatttgcg gttggagtag atatagattc 240  
 tgtagctata gactggtgct tcaaacaagg tttattgagt cttccgtctg gtagtgatag 300  
 acttgagcta gtagtagcag actgtagaga gtatgaggat aaaagatcgt atgacgttat 360  
 ttctgccaac aactatagct tattctttct cacaaccga gtggatctct tgagatattt 420  
 gaag 424

<210> 1331  
 <211> 424  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-H11

<400> 1331

gacaaggcca caggcgaatc cctttgttat ggctttattg agtttcccga tcgcaaatgt 60  
 tgtgaacaag cgttttttaa aatgaacaat tgtttgatcg atgaccgaag aataagagtt 120  
 gacttttcac aaagcgtggc caagttatgg aaccgagttc gtcgaggcta tcatgatcgt 180  
 tttgatgaga aggaatctgt tcagagtcgt ggaaaacgaa cttataacga atatgtattt 240  
 gatgatttgg aaaggaaagc tttatctcaa gaaaaacgtt ccccaaagca caaaaaaag 300  
 tgaaatgagt gttttccttg acacaacaat atttattgca tatttaaaat tccagtttct 360  
 tcggtatttc ccaagtaaac gtcggttcca ctttgggatc tcttccgaaa tgtccgtacg 420  
 ctgc 424

<210> 1332

<211> 99  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-H12

<400> 1332

gtccaaaaaa aaacaaaaaa gtaaaacaaa acgaataaat ataaaagaat aaaaaaatg 60  
 gaaaaacata aaatcacaga aataatgtca gaaatggtt 99

<210> 1333  
 <211> 333  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-H6

<400> 1333

agcaaagatt tgctttccaa agaaaattcc tcggaatatt gaaatcatga taaaagtat 60  
 acgaactctg actgaaaaag tagacaaaca tagtatgccg agtaacacag gagaatgggtg 120  
 gatagccaaa gagctttgaa aaccacaggtg tttgcacttg tagcaaaactg ctttaattcta 180  
 atgagagtcc ttttcaagag ataaggatga tgaattttgc actgtggctt taaacgaaca 240  
 cttacctcta tcttcttcgc ttttatcctg cagataagca aagggttttg cgagagaaat 300  
 tctccttttc tttgagacat gcggtaaatc tgc 333

<210> 1334  
 <211> 375  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-H7

<400> 1334

gcgtccgacc acgcgtccgc ccacgcgtcg gttgaaattg taaacggcgc caaaaacaaa 60  
 aatggtttaa cggcaacaaa atttcccccc aagaaaatgt caattagcat ttttgaaccc 120  
 tgaacctgcy aatcaggcct tgcctcgagt cgtcgaagtt cttggagata tccacaattg 180  
 gagtggcagc cgacgagaag aagagttgga acaggggaaga agattccttg catcattcct 240  
 tggaggaaga acagaacctt aagtgaacaa ggtcacatag cccagttgta cttttctagt 300



ctttattcct agatacccat tttcttagtg catacaaact atcaggtgta aactgtttct 360  
gtttgctatc aaaaa 375

<210> 1335  
<211> 222  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-025-Q1-E1-D10  
  
<400> 1335

gtttgctatc tctaaattgt gtatgaggta tggttctaac gcaatggtag ggcaaagacg 60  
ctatgtgcac tttgtgaacg tgccaactac tatgcaaac atggttctgg gagagttatt 120  
tgtcctgctt gtaatagatg gcaagtatgt gccttgtcac ctttggtatg cgactggaaa 180  
tgccattgat ttgaaatacg gtttttgga ataatgcttg ga 222

<210> 1336  
<211> 172  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-025-Q1-E1-H12  
  
<400> 1336

tccgaatcaa cttcaacaca aacgcattgt cgtttggcac cttccttctc atgtgagtat 60  
ggcaacgatt gaacagatct tctcaaggag gggggaaaca ctctttggcc acaagtgagg 120  
ggtgtgacgac caatggactg tgggtgcgaca ctgatgggca ctgttctgtt cg 172

<210> 1337  
<211> 460  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-026-Q1-E1-A1  
  
<400> 1337

cacgcgtccg ccagcgcgtc cgcccacgcg tccgacaacc atcacatgcg cggaacaaaa 60  
gcgccagaag agcacctcca caatcagctg aaccaagatg ttcttttaag agttgtgaga 120  
tttgctttgc tttttccacc agaggagaca aggagaaatg ctagctgaag agcttttttt 180

ggctgcttcg acttttacct aactcggcga tgcagtggag tctcaggtat acccaacaag 240  
gacgttgctt cacaaggacg gcgtcgagag agactcatcg tcaaagatag cagcaactga 300  
aagtctattg tgacgcttca gctgtaaaaa agtgctattg acttgccaag tttgctggct 360  
acttggaacta tcttgccgtt gttccagaga cggcacaaga ctacctttga aaatacgatt 420  
attttgagca aggtgcgact ctagaacctt ttgtaacaat 460

<210> 1338  
<211> 430  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-026-Q1 E1 A12  
<400> 1338

cacgcgtccg ccaacgcgtc cgcaaccgga atgtggcaag ttggcaagca agtcagaaaa 60  
acaagagagg aatccagtat tcccatcggt cctttttctg caggtgtata cattgcagct 120  
atgatggctc agattgacat tttgatggaa aaggacatc cggtttcgga aattgtcaac 180  
gaatccgtca tagaatctgt agactctctc aatccatata tgcattgccag aggtgtttct 240  
tatatggtgg ataattgttc tactactgca agacttggtg cgagaaagtg ggcacctcgc 300  
tttgactata acattttctca gcaagcattt cctgttcttg acaatcaaga accgttggac 360  
atgcgcaagt tggatgaatt cttaagtcatt cctattcatt cggcggtatt ggagtgcgca 420  
aagttacgtc 430

<210> 1339  
<211> 419  
<212> DNA  
<213> Cyanidium caldarium  
<223> unsure at all n locations  
<223> Clone ID: LIB190-026-Q1-E1-A3  
<400> 1339

gtcaggaatc agcagtctga cgatgttatt aagagattat gctccttctt gtgttcagca 60  
acaagagttg aaaaactatt ttggtanaaa gattgcagtg gatgcttcca tgaacatata 120  
tcagtttctt tctgccgtaa gggctggagc agataattta agaaacgaag caggtgaagt 180  
gaccagtcac ttgagcgggc ttttctatcg aacgacctgt ttgatggaat tgggagtttt 240

accttggttaa gtatttgatg ggaaaccacc acaactaaag agtggagaat tgagtaagcg 300  
 tatcgaggca agaagacagg cagaagcaag tgcagcattg gcgaaagagg aaggagacgt 360  
 tgaatcatat gagaaattca acagacgagt gaataaagtg tcgcccaggg ttatcgagc 419

<210> 1340  
 <211> 255  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-026-Q1-E1-A4  
 <400> 1340

cttactacgt taggaggaga ttatgctcct tcttgtgttc agcaacaaga gttgaaaaac 60  
 tatttttgta caaagattgc agtggatgct tccatgaaca tatagcagtt tctttctgcc 120  
 gtaagggctg gagcaggtaa ttttaagacac taagcagggtg aagtgaccag tcacttgagc 180  
 gggcttttct atcgaacgac ccgtttgctg gaattgggag ttttaccttg ttatgtcttt 240  
 gatgggaaac cacca 255

<210> 1341  
 <211> 424  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-026-Q1-E1-A5  
 <400> 1341

gtcgatcaag aagagagatg gcgtcttctt caactgccta tttttcaagc aatggagggtg 60  
 cagaaggagg ccttgagagt acaggaagca atattgttta tgtggtagta gctgcaggta 120  
 cgaatatact tgcccagtac gccgccgaaa aggggaatta tgaagctatt gcgtcacgta 180  
 tattagccaa agttccacaa cacgacgtga agagctttta tgaaaacgat aaccttagtt 240  
 tcaactttat ggtatctaata ggaataacct atttatgtat cgcaagacga ctttaccctc 300  
 gacgactcat atttgggttt ctagatgata tcaaaaagcg ctttgtttcg caatatgggtg 360  
 aaagcgcaaa gacagcagggt ccccttcata tgcagcacga gtttcgtcct attttaagc 420  
 agca 424

<210> 1342  
 <211> 308  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-A6

<400> 1342

ttttgattgt ttatcgtttg tcaaagtttg gttgttttct tggtagcagt tgtacattca 60  
 acatcatcaa atgccaaagg gaggaagaa agattcttca aagaaagaag ccacaagtaa 120  
 acctgcagca gcagatgcta caaagacgac agaaaagtct ggtccggaag ccaagttgaa 180  
 gggaactggt gcaaagaaac aataaaaagt tgactatgca tgtgcagtc tgttatgttt 240  
 tgtgagttct gtttgatagt ttccagctat tcttttgga gtgaataaag agaaaatttt 300  
 ttatatatt 308

<210> 1343  
 <211> 432  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-026-Q1-E1-A8

<400> 1343

acgcaaccgc agggatcatt ccaagttggt aaagatagac ttgtctcaag gcagctttaa 60  
 agtactccaa gactgtgaca aagatttaga atgtgatcat aataccaagt ttcagttgga 120  
 acttattcag tatggtctct tttcacctgg tttttggacg agagaaaatg ttctgctctt 180  
 ctatttggag ctctgtgcag gtgtattcat aaggacact ctctaccttt tctacaacaa 240  
 aggtgaagaa catttgtttg cgagtttaat gctgttggtg gagacacaag tctcactgta 300  
 tgcagacata aaaacaaact gggagaaacg acactttatc gttggcctca tcgtcaggtc 360  
 tttgtgtgag gaatatcaac gacagtattc agagctatgt tcaccgaatg aaagcacgan 420  
 agatatgcta ct 432

<210> 1344  
 <211> 419  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-B1

<400> 1344

attcctaccc aagtgtttcc ttggtattgc tatcggtggg caacctgcag gaaggattgt 60  
attcgagttg ttctccgatg tcgttcctaa aaccgcggga aatttccggt gcctgtgtac 120  
ggatgaaaagg gtttgggaca aagaccaag tttataggat aattcccagt tcatgtgcca 180  
agggtggagac ttttcacccg gcaatggaac ccgtggcaag agtatattacg gcaccaagtt 240  
tgaggatgaa aacttcaagt tgaagcattc cgagcccttt ttattgtcca aggccaatgc 300  
tggaaccgaat accaacggga gtcagttttt cattactgta gttaaaacac cttgggttga 360  
tggaagcat gtggtgtttg ggaaggtttg ttaaggtacg gataatctta aagctatgg 419

<210> 1345

<211> 434

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-B11

<400> 1345

aatactctat aatgacgtcg tactatcggt tgttttgtct tttcaaagct agaagactat 60  
ttatttcctg ctatgtttta gaggtccaa agattttttg tgctcatctt attccatgct 120  
tcgtggtggg tgaatggctc ctttgacaac aggggtgtca cgaccccgcc aatctccaca 180  
acttcaactg ccaactgtg cgcgtatatg tagatatatt tgtacagatt cgtggtgtag 240  
aaagaagagt gcaaattggt gaaaagtaac agcagagggt tagtatactt ttagagaaag 300  
cacttgaaaa agtggtcacg tacttttaca tatctacctg taataactgt ttttgcttgt 360  
agagattaca agtttactgt acttgacaag gtttccaagt ttcattcatt gcctttaagt 420  
atgtatgatt gtac 434

<210> 1346

<211> 428

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-B2

<400> 1346

gtccgagcga ttatttacac agactcagag cggaccacaa ccagatgcac caaccaatga 60  
tacttctgaa actatatata tttcgtcact agcgttggtta aagatgctca agcacggcag 120  
agcaggagtg cctatggaag ttatgggact catgttggtg gactttgtgg acgactatac 180  
tgtaaagggtg gtagatgtgt ttgccatgcc tcaaagtgtg acaggggtca gtgtggaagc 240  
agtagacca gttttccaaa caaaaatgtt ggatatgttg aaacaaactg gtcgacctga 300  
aatgggtggtt ggctgggtacc actctcatcc cggttttggt tgttggcttt caggagtaga 360  
tattaatata caacagagtt ttgaagcact gaatagtcgt gcagttgctg ttgttgtgga 420  
ccccattc 428

<210> 1347  
<211> 276  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-026-Q1-E1-B4  
<400> 1347

tctatagtgt tacatattac gaacacagct tttggtgaag tgtgtgaaac tttttgttag 60  
caaattcaaa taatcacctc tttggtttgc aagtgggtgt gttagcggta cttgtttggt 120  
tgaaaagaac aactgctttg tttcttgttg aaacaagttt cttgtgaaaa aaaaaaaaaa 180  
aaaaaaaaagga aaaaaaaga aaaaaaacg aaaggataac aaaaggattt acacataaat 240  
acaacgtaaa agcaacataa aaactgtcac aaaaat 276

<210> 1348  
<211> 452  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-026-Q1-E1-B6  
<400> 1348

ccacgcaacc gcaaacgcgt ccggattttt cttgtggagt actgggggttg gttggaagct 60  
atctttgagt gatcattatg agcaagaaga taggtaaggg aggaatagag agtgcacata 120  
tctaggtaaa ggatactgtc tacagtcattg gaacaagcta gaattagtaa cagtggaaag 180  
ccagaagagt agcaacagca gtcattctat gtcttttccct aaaggcacct ctgcaatctt 240

gtttcccta gggcaacttg gcagttggag acaaggcgag aatcttctgc agagatagca 300  
 gtgcaacttg tatagcaaga gtgacttggt cgccaataat aatactgagc ggcggtgaca 360  
 ctactgtcat tgtgagtcac tcagttgcaa aaaccacgtg acaaggtgat tctttgaaac 420  
 gaataaaagg ttcaagttac ctgttcttta ca 452

<210> 1349  
 <211> 448  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-026-Q1-E1-B8  
 <400> 1349

ccacgcatcc gcaaacgaat atacctacaa cgctctcata aagggttatg cgagagcagg 60  
 caacgtgcāa agtgcagtcc aaatttccaa tcagatgcac agcgaaggaa tcgtccctcg 120  
 tgctataact tatagcgtgt tgatcgattc tctaggaaaa tgtaagatgt tggatgaggc 180  
 gtttgctttc ttcgaggaaa tgcaagtcaa aggtatttca cccaatggga tcaacttttaa 240  
 tgttttgtta tcggcttgtg ctgcttgcaa cgattatacg agagcattga tgatcgtaga 300  
 gtggatggaa caacgaggaa tggactttga ccgatacaca tttaatgctt tgatacaatc 360  
 tgcagtgaac agttaaatt atgaagaggc tttgagatgg tatgaaaaga tgattcattc 420  
 cctcgtcgtt tcaagtaatg tgactttt 448

<210> 1350  
 <211> 313  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-026-Q1-E1-B9  
 <400> 1350

aatcctctag agtgaatcat atcatcgga ctattgcacc tatgacagaa gtatggtcta 60  
 cgaaaattct tgaatatcag caactgggtg ctatctactg ataaggggat acttgaacat 120  
 gttctcttgc atcacttctg gccccctgag gtacctggag aagcttctac agacatagaa 180  
 tctgcttggg tttctgaata tatagtacaa agtaaatttc gcgaccttct acagctcaaa 240  
 aaaaaaaaaa aaaaaaaaaac aaaaaaacaa aaaaaaaaaa aaactaaaac aaaacaaact 300

gtataataac ttt

313

<210> 1351  
<211> 442  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-C1

<400> 1351

gtccgcaaac gcgaccgccc acgcgtccgg ggacccttgt cctgaagaaa cgcaatggct 60  
cattgaagag cgtcaaaaag gggagagAAC caatttcttt tcctagacaa ccacaaaaag 120  
gttttggtca gaactgtata tttgaaagta aaatattacg attgtaaact acaagggaaa 180  
gatgacattc agagtaatgc tagaatgagt gagaagatat gtatcagcat ggagaatctc 240  
tttgtggcaa tagtgctcat catatatata tatatatata tatatatata tatatatata 300  
gagagagaga aagtatagaa atcattctac ataccgtgtt ttcataatatt tacatgctct 360  
tgatcttttc tacatattct tccgcaatat tttgaagttg tcgatttttt gacaccgcgg 420  
gcaacaagac ttgcaacata aa 442

<210> 1352  
<211> 57  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-C10

<400> 1352

caattctcta tactgacgtc agtattataa aaaccaacca acccttgctt ggatggt 57

<210> 1353  
<211> 239  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-C11

<400> 1353

acgcgtccgg acgggtgtaa caaatattgt atggataaac gggattatat gggatgctgt 60  
agtttggtaa caatacctga agagtggccg ttgttgaggt ggaacgcgga aaatattccc 120



cgactgagta gttgagactg gcagcaaagg aacgtgtagt acttgggtag aacacaaggt 180  
 ttcggttaag caacttttgt tctagttgaa atacaaatgt atgtatccac aactcatta 239

<210> 1354  
 <211> 422  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-026-Q1-E1-C12  
 <400> 1354

cacgcgtccg aaaaaacgtg ggcggacgcg tgggtggtaa gctgctgagc gtcaagtagt 60  
 agaattgctg tttattcatg gacgtaaagg ttcctttgct ttttcttcct agtgatttgt 120  
 tttttgacgc gatggctcca tgtctaggag ccataggagg actttatgaa catagtgggt 180  
 acaatttttt cccctttttc gaagctctgt caactgtacg tgtgaatagg attgaacggt 240  
 ttgttgtttt tgttgcttac atatgtatca ggttgacat actatgcaat catgtgcgtt 300  
 ataattgtag ctatagtgat ggcgtacgtc caacgaattt aatggataat gcattgcaaa 360  
 cgacctatta caattatggc tacaagtaat ttgaataatt tcatttgaca gatacataat 420  
 tg 422

<210> 1355  
 <211> 446  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-026-Q1-E1-C2  
 <400> 1355

ccgtccgcaa gcacaaatag ctgtagaaag tatgttggga agaacaaacc acactttccg 60  
 tgggtgttcaa ggtacctttg tttgtggtgc atttggcatg gttgttgctg ctactggcgc 120  
 atcggagaag aagttacaga aaagaggctg gaaacaagga cgtgaatatg aagccgcagt 180  
 tatccacgct ggatcacatg ctggttatta cccaattca aaaacggtac atctaaagtt 240  
 gctctttgac ttgaagactg gaaagatttt gggagcacia gctgttggtg aagatgggtg 300  
 ggacaagcgc attgattgta ttgctatggc attacaagct ggtatgactg tgctggactt 360  
 ggaggaagca gagctttgtt atgtcctca atttggttcg gcaaaggacc ctgtcaatct 420

tgccggtatg gtccctgcaa aatatt

446

<210> 1356  
<211> 281  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-026-Q1-E1-C4  
  
<400> 1356

tccgagaggg gagacaagac cgatagatga tgatgatgcg ccgagtagag acgtgacttg 60  
gttggttcag atcgtttgga acaatagaat cttgtagaat ttttggcttt tttggtggtt 120  
tatgtgctgt tttgtgacta aagtgtctgt actgaatata tgctgttgac atgaagtttg 180  
ggaaaaagtt acaagacgca ttggaacctg caaacatcga ttggaagccg tactttatac 240  
actacaaggg tttaacaagg ttaattgcta cgagtgtggt g 281

<210> 1357  
<211> 430  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-026-Q1-E1-C5  
  
<400> 1357

tgccaacgcg tccgcggaag cgtgggtttg gtgtgggaat tccttcctgt cctatatatta 60  
cacagtttca gcaggtacaa ccagagaagt ttgtagcttc atttcagca aagttacttg 120  
gttctccttt tttcttcttc cttttaccag gagcttcact tcctgcaaata actgtcgcat 180  
cgttgtacta tagtcttccg ccttatgaaa actggtcttt tattggtctg gtaggaaacg 240  
attgtcccag taaactgtgc actgtaaagt taccagctca gtcggcatca gaagaagtta 300  
tggttgagtt gggatatttc attgaaagta tgtcagaagc ggctttggct gttccaacca 360  
gtccaacat agtttttagat cagtcagatt ctacagcttc tgttcgaggt atcgctactg 420  
acttttttcg 430

<210> 1358  
<211> 439  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-C8

<400> 1358

acacgcaacc gtagtccgtc atagaaaaaa gtgtgcacaa catcaacttt catagcagca 60  
atgtcacctg tttagcggtg aaagataaag gtccactcgt ggcaacttgt tcggaagaca 120  
agtcctgtagc gttgtgggac cttcgagtca cggccccgct gcagagcttg aagtgtcttc 180  
accccctgag ttgtgtatct tatggaagag atgactcaga aatcataaca tcagactata 240  
gtggttcggc aaggatatgg aatattgaaa caaatcgaca aattggctgt ttacagactc 300  
gcgactcttc tattctcaca ggttttcttc acgatacagc ccgctcacta tttattatgt 360  
ttggaagctc tggatacgta aacatcagtc cactaaactc caaacgggga acaggagagc 420  
gttaacttcg acttaaata 439

<210> 1359

<211> 394

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-026-Q1-E1-D1

<400> 1359

gtccgcaaac gcaaccggtc gtttgaatct cgatgtggtc gacgactttg aaagtcttga 60  
taatggaggt gatagttttt gtgccctgat gcagttggag acattctggg tattttcctg 120  
aggcgatatt tctttcctcg tttgcttgaa gaactacaac atttcaaggc aagatagatt 180  
tgtggaatag tgaagtgttg ggcaagaaaa ggaagtatta gtcttcccga aatggacctc 240  
aactgcctaa gacatatgat tacttgccct gcattgtaat gctttacatc gaggttgctg 300  
anaagaaata tacacttact ttcacaattg ctcatanagg gtttcaacat gagcagtttc 360  
ttgtggtctg tccagttgag tactgtatgg catg 394

<210> 1360

<211> 294

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-026-Q1-E1-D12

<400> 1360

cacgcgtccg gattgttgtt tgtcatctcc aaactgtgta ngaggatatgt tctcaatgca 60  
atggcacggg aaagacgcta tgtgcacttt gtgaagggtgc caactactat gcaaaagatg 120  
gttctggcag agttatttgt cctgcttgta atgatgccaa atatgtgccc tgtcactttt 180  
gttatgcgac tggaaaggcc attgagttga aagacggttg gtgggaagaa ggcttggagc 240  
agcaagtaag gaaaaataa ctgggataga aaataaaact tggcattttc aacg 294

<210> 1361

<211> 433

<212> DNA

<213> *Cyanidium caldarium*

<223> unsure at all n locations

<223> Clone ID: LIB190-026-Q1-E1-D2

<400> 1361

tggtagaaga agtacaaagc aagcagtgca tcaagtatgt atctcttcag aagatcaagt 60  
acgagtcatg ctctgccccaa tatgaagttc aaaagatcaa acagcaacaa tgtactatga 120  
cagtctctga acaatacata cagccggata cttgctacaa gtatgttcct gaacaacaat 180  
tggtgcctca gacttggttac aagtattatt ctgtacccaa gtttattgaa aagtgtctatc 240  
ctcagtatgc aacaacggag aaatgtgtan agtatgagta tgttccatat gccacttcta 300  
caccttatcc atcggtatct ccaagttata ctcttcagc atatcaaaca acttctgctt 360  
attaaagagc cgaagactgg atagattttt gaagtgtctc gtgttcaaag aaaacatgag 420  
acatgaagaa aac 433

<210> 1362

<211> 460

<212> DNA

<213> *Cyanidium caldarium*

<223> Clone ID: LIB190-026-Q1-E1-D4

<400> 1362

cgctccgcaaa cgcaaccgac tcgtcattgg aatagagaca gatgaaacca ttatctgtat 60  
ttacttttgc atattcgaca ctctgttcta actttctgcc aaataaagag tcaagtgcga 120  
acgctcaagt tatgaaacag ctcatcgga acctgagaga aaaagtggaa gaaatagcca 180

aaggaggtgg agaaaaggct ataaggagac acgaagaaag aggaaagttg tttgtacgcg 240  
 atcgcattca aaaactgttg gatcctactt ctcccttttt ggaactttct ccattggcag 300  
 cttatcaagt atatgatagt ccagttcctg ctgctggatt ggtaactgga attgggtctgg 360  
 tacatggcaa gaaagtaatg gttatagcca acgatgcaac taacaaaggt ggaacttttt 420  
 ttccgttaac ggtgaagaaa tatttgagag cacaaagtat 460

<210> 1363  
 <211> 455  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-026-Q1-E1-D5  
 <400> 1363

acacgcatcc gtagtcacgc tccgaattgt gcgtgttggt tgggtgtagt agagacgcat 60  
 tcgatgactt gtgggtttgt ttgtggagct ctacattctt ggagttttgc agtgcacaat 120  
 agacaaagaa aagtttccgt atgtaaaagt caaactacga cgttcctatc tggatcaaag 180  
 caggtccacc tgcgagcgaa tattttccag aagacaagta ctccaaaagg ggaagagga 240  
 agcttggtga tgattatttc caacggatca aggttccttg aggatgttac ttttacaacc 300  
 ttgcaagatg gtcaagtaaa ggaaatgaaa gcttcagaaa ttttcaacgg gaagaaagta 360  
 gttatatttg gtgttcagg agcctttact ccttcttggt ccgacaagca tctcccgggg 420  
 tttgcagaaa atctcgagaa gttcacggaa aacgg 455

<210> 1364  
 <211> 454  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-026-Q1-E1-D7  
 <400> 1364

acaagcatct acaaacacgt tctggaaaaa cgatgcctgg gattattgaa gcgatatgtg 60  
 gaggacttgc cattggcttt tccgtcgcgg caaatgctgt tttgctcgga agagtaactg 120  
 gtattagtgg catcgttggt ggtatccttg cgaaacagtc aggttttgga tggagactat 180  
 cttttcttgg aggacttgca ggaggtggtt ggggtattaag gaagtttttg ccgagtacgg 240

ttcctatcgt atctggactt gtgtctcccc tcagattggc tcttgctggt gctttggttg 300  
gctttggcac tcgattagga agtgggtgca ctagtggcca tgggtgatgt ggactaggac 360  
ggatgtcaaa gaggtctctc gtgaatgtgc tagtgtttat gaccagtggg gcgctaacag 420  
caattcttac gaaaagtgtt agtgcatatg gaggc 454

<210> 1365  
<211> 355  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-026-Q1-E1-E1  
  
<400> 1365

tccgcaaagc caaccgcgga cgcgtgggtg cgtttggtgg tcgtgttggt aagctcaaac 60  
aactattgcc tagatgggtc acgcaaatac ttggtatagt catcctcgaa attatggaaa 120  
aggaagtcgt cagtgtcgag tctgttttgc gagatctggt cttataagaa aatacggttt 180  
aaacatttgt agaagatgtt tccgcgaaca agccaaatac attggattcg aaaagtttca 240  
gtgagaagag cgaacaagaa tgcaaaagct tcttttctgt aagaaatgtc tcgttagtat 300  
tcctcttctg agaacgttgg gcagacaata aaaatatttt caacttttgt ttac 355

<210> 1366  
<211> 312  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-026-Q1-E1-E10  
  
<400> 1366

gggggggtgtt tttttttttg ttttttgggt tgggttgggt ttttttcttt tttttttttt 60  
ttttgtttgt tgtgtttctt ttttcttttt ttcttttttt ttttttgggt ttttttcttt 120  
ttttttttgt ttttgttttt tttttttttt gtgtttttgt tttttttttt tttgttgggt 180  
tttttttttt ttctttttgt tttttttgtt tctctttttg tttttttgtg tttttctttg 240  
tttttgggtt ttcttttgggt ttgtttcttt tttttttgtt ttcttttttt ttttcttctg 300  
tgtctttttt tt 312

<210> 1367  
 <211> 190  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-026-Q1-E1-E2  
  
 <400> 1367  
  
 taaaaaataa aaaaaaaaaa aaaaaaaaaa aaaaaggaaa aaaaaaaaaa aagattaaaa 60  
 ggataaaaaa aaaaaattgg aaaaaataaa aaaaaaaaaa atggggggagg gggattagaa 120  
 gtgtggagta ctgttttggg aggtggggta ttgtaaaaaa gtgggggttta ttcaattgga 180  
 gaggatgttt 190

<210> 1368  
 <211> 317  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-026-Q1-E1-E4  
  
 <400> 1368  
  
 ctctagaatg agacgcatca agaaacaacg gagagttatg aaacgttgat aaaagtattg 60  
 aaaaagcgta ttgaacatat gggaagcagt tttaaatgg atgaactggt gaatggcaaa 120  
 aacacaaaaa cagtattaaa agagaaactt aaggtgcaaa cagatctgac ggaaaatagt 180  
 cagaaaaata agtcttcaag ctcaagagct tcttggaag agtctttgcg gagtgcgaat 240  
 agaagagaca actggaatgt tcgacttcgt agtttggaag cgcagcttta tgcacttttt 300  
 gtatttgttt tgtaaat 317

<210> 1369  
 <211> 451  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-026-Q1-E1-E5  
  
 <400> 1369  
  
 acacgcatct gcagacactt ctggcaagcg tgaaccgtga gggtagttca tcatgggttga 60  
 gacaaaaactt caagatgggtg ttagtgcttc tctttggact gttcgtctct tcctctacac 120  
 agttatttta gcattctctg ccactatcat tggcttggat ggacgtaaag cagacaacat 180

atggaacgac agcttattct atgatgggaa gtacattaac ttttgtgctt attctgcctc 240  
 ttctgttgta gaaggagggg accatggagc gtgtaaatat gtcatggcgt tggcgtctat 300  
 aagtttgatt ctagtctttt tcttgtggct ttttacattt gtagatgcgt tgtatcctat 360  
 tcttaccaag ttttggttta ttgaattggg tatcaacgtg tttcaaaca tgtgggtggt 420  
 ggttgagca attgttgat ctgcaaaaag g 451

<210> 1370  
 <211> 464  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-026-Q1-E1-E6  
 <400> 1370

ccacgcatcc ggagattgca aataggccaa agtgtgtgtg tgcgtgtac gagggttggt 60  
 catttggtga gctgaagagt caatgaacaa gcttcagttg ctatacgtaa ccaaacaagc 120  
 tgtttcaaaa gcatggcaaa gagaacagaa aaggttatac tccgagaaga aatcagttgc 180  
 agaaggaact ttgggaagca ggtggaagga aagagaaact gcacaagaga gcgcgtactt 240  
 taatcgtgaa gatgagcagg cagtacaaag gttagcagcg aaacttcggc agcaaattga 300  
 gccatcggag gaagtactcg cccaacaaag aaaaggcgtg gcagaaatct tacaaaagca 360  
 cgggtgtccag cctaataaaa gtttgattga agatattgtc cgtttctttc attaattcct 420  
 ccgtgtttga tgtttactgc ggttcaacta gagttttgtt tggg 464

<210> 1371  
 <211> 454  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-026-Q1-E1-E8  
 <400> 1371

acaagcatct acagtgactc gtggtatttt gagatcacac aaacacttgt acactgaatg 60  
 aacgacgtat gggactaac tgtgcatttt gtatagatat caaggatgtc aaatatgtta 120  
 tcaactacga tttcccgaat actatagaag actatgttca tcgcattggt cgcactggtc 180  
 gtgctggtgc ccttggaag tcccatcgt ttttactcc ggataaattc cgtgttgcca 240



aagaattagt taacttggtg cgagatgctg gacaggacat tcctcccgag ttggctcggt 300  
 tgataaaaac ttcgtccttt ggcgtaaca acagaaactt ttctcgttat cgaagttaca 360  
 attctcgggg cggctcattt tcaaataatg gacgttatgg ctacgggaat catagcaata 420  
 atttcggaag gagccgatag ctcttaataa aaat 454

<210> 1372  
 <211> 430  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-026-Q1-E1-F1  
 <400> 1372

tccggaaaaa ttataggaac gataggatgt ggagttgcat gttttcgggg tggcgacttt 60  
 acgagttggt gctttcatca accgtcaggt acgacattga atggagatat attgtatata 120  
 gcagataccg aaaatggatg tttgcgaatg gtggatatag aaagcgggtca agttgagacg 180  
 atctttcctg aatcttgctg agttgactgt aataataata acatgactcg agcactagaa 240  
 ttttccgata tttggagaac tccttggaac cgtccaaaaa aagggatcct attgtatccg 300  
 ccaactttgg acgacccctt tctgttggtg tcaaggataa aagtatttct gtccctggcta 360  
 tagctgatga cgatatggtt ccaaaaaaga gtttgcacag taaaaaactt agcagcctaa 420  
 aacctactat 430

<210> 1373  
 <211> 402  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-026-Q1-E1-F11  
 <400> 1373

acgcgtccga atctttggtg agttgtcgtc gtcgacgtat tcagaaagaa ccaaataggc 60  
 acacgactta caagaggact atcgatattt ctgccacctc aaaccatgaa actagtact 120  
 cacaaattcc ccgagtaccg aacgttgcac cgagtggaaa aacttggaac ccgcagtgg 180  
 tgaggacagt tgctcctgaa agcgttcata ctggttatgg agaactaaaa gatactgtaa 240  
 aaaagcttgg tttgcataca gtttgtgaag aagcgcaatg tccgaacatt ggtgagtgtt 300

ggaatggtgg cacagctacc gttatgttgt taggggatac atgcactcgt ggttgtcgtt 360  
 tttgtgctgt gaaaaccaac aacaaacctc ctctccccga tc 402

<210> 1374  
 <211> 382  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-026-Q1-E1-F12  
 <400> 1374

tacaagactc tagactgagt catattatga ggcgagaaag cataggaagt gatgaaatgc 60  
 agagatctct agagaaaggc aagaaagaaa agaaaggaag acacagtaaa tgaggcgaga 120  
 aagcatagga agtgaaacgg attacgaacc cgtgtagtct atgcagtaaa agaaagaatg 180  
 agtaagaaaa aaggggagtca ttccaccagg ggagtaaagg cgcaagaaaag aaacccaaaag 240  
 caattgacgg gaatcggaaa aaggggtgga tcacgtaaata taatccgata aaccgagaaac 300  
 cttacctctc caagaagggtg ttgcacggct gtcgaaagaa cgtgctgtga agtgagagaa 360  
 cgtacgagaa agccaagtta gg 382

<210> 1375  
 <211> 461  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-026-Q1-E1-F2  
 <400> 1375

cgtccgcaga cgcattggcg gacgcgtggg cgtgtgtagc aagcgtagag cagaagaact 60  
 ggggtgtaaag gtcgagtagt agagtaagtg taaaagggaagg agaaaggag agaaagagga 120  
 aagggatgaa atgcagagat ctctagagaa aggcaagaaa gaaaagaaag gaagacacag 180  
 taaatgaggg gagaaagcat aggaagtgaac acggattagg aaccctgtga gtctatgcag 240  
 taaaagaaag aatgagtaag aaaaaaggga gtcattccac caggggagta aaggcgcaag 300  
 aaagaaaccc aaagcaattg acgggaatcg gaaaaagggt tggatcacgt aaattaatcc 360  
 gataaaccga gaaccttacc tctcaaagaa ggtgttgac ggctgtcgaa agaactgtct 420  
 gtgaagtgaag agaactgacg agaaagccaa gtgaggaaaa g 461

<210> 1376  
 <211> 451  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-F4

<400> 1376

gtccgtaggt acaggttaca ataatgaagt atccaatcat tttgtagata agcagaactg 60  
 ggtaatcgat accagaaaaa aggtttcttc ttcgtcatct actccttcgc atgatatgaa 120  
 ttactccaac tccgatcaag agggctcctg tatcggccgg aactgccaac ttgtagtttg 180  
 ctcgatagaa aacttggaag agttcttggg taaagaaatt tatgacaaaa tccagaaagc 240  
 tcgctgctcg gagagggaaa actttttgac caatgtgact cctctatcca gtctgatagg 300  
 aacgttggtc gaacatggat gggcacgcgg tagatctgcg gaacctgaag cgtatctcga 360  
 aaagtctatt gagaagaata ttggtgcgaa tagagtagat tcgactggca aatcttcttc 420  
 ttctgttgtc cagtgcgaca aggccagttt g 451

<210> 1377  
 <211> 231  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-F5

<400> 1377

tacaagcatc tacagacact cgtgctaacg cgtgggtatg cactcgctcg gaacggttat 60  
 ttgttttggtg tgttggttaga tactttgatg taaaatagtt gacaaggggtt tattgcaaaa 120  
 aggttgaata gtaactcggt ctatatgggt cggttgagtat tgtctagaga caagtgggac 180  
 aattagtatc cacctttatc ttogcatata cataaatata tttatttatt t 231

<210> 1378  
 <211> 459  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-F6

<400> 1378





atcatatgaa agaaggaatg gagaatataa ggaaggatta catgaaggag gagataataa 420  
gagaaatgat aa 432

<210> 1383  
<211> 442  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> unsure at all n locations  
<223> Clone ID: LIB190-026-Q1-E1-G12  
  
<400> 1383

ccacgcgtcc ggagaatatg aggaggagtg gctgtctctt tgctctcca aagggacttt 60  
attggaaaag agtcttctct acagaatatg attatacagg aggaactgga agagaatcca 120  
caggattgtc ggcttccgaa caagaagcaa gagagaaagt aatacgtttg tatcgatatg 180  
cgctaagtag tgtcaaagat attcgcaaac actatcgttt aaatgaaagc anagaagata 240  
tagctgcttg tattcgagat ttatttgaaa ggcatagaca tggtcaagat cganagctta 300  
ttgatatgtt ggtgttcaag ggacgacagg acatagacga agttcgcgcc cagtggaaaag 360  
gtcgtcatca ggttctcaac ctattaagag catttgaaga aaagaaaatt aaagaaagag 420  
cgcagcttgt tgatgaacaa ca 442

<210> 1384  
<211> 368  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> unsure at all n locations  
<223> Clone ID: LIB190-026-Q1-E1-G2  
  
<400> 1384

gggttggtgt tttttttttt tttttttttt tttggtttgt ggtgtttttt ttgttgtttt 60  
tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt ttttttgttt 120  
ttttgttttg tttttttttt tttttttttt tttgtttttt tttgtttttt tttttttttt 180  
tttgtttgtt ttttttgttt tgttttgttt tttttttttt tgttttgttg tttttgtttg 240  
ttnttttttg ttttttggtt tttttttttt gttgtttgtt gttttttttt tttttttttt 300  
ttttgttttg tgtttttttt tgttttgttt tgttttttgt gttttttttt tttgtttttt 360

tttttttt

368

<210> 1385  
<211> 291  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-026-Q1-E1-G4  
  
<400> 1385

ctctatagag acacttaata ggagctcaaa agacagcagt ctttgggtcg gcaaggagtt 60  
ggtcacgatg catgctttga cggtaacttg ctttattact gagaaataaa aactgactat 120  
cctttcatag gggtcacgag cgggctcgaa agttgctgaa ggaatcctcg atgttcagtt 180  
ttatacccaa ccagcaccag aagcttcatg gaaggttctg taagaaaact agttcgagat 240  
agctatagga tggaagcttt aataaaaagc cagaatctga ttcaatattt t 291

<210> 1386  
<211> 447  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-026-Q1-E1-G5  
  
<400> 1386

cccacgcac cggagccatt caggaacgat atgagcagga gttaagaaga tgggaggaag 60  
tgataagaag aaaggaatga ggattcaagt agagcaatag aaggaaggaa aagaaggaag 120  
aaagagaaat aaaggatggt agagaaaaga ccaagagtaa gaaaaggagg ttcaacaggc 180  
atagcaccaa tccaggtaag aaggaagaag gaagcaagga aaaggaagta aaagaatcgg 240  
aagagaggtc taaagagaga actacgagaa gagaagctgt gtatccaagg aagaagagca 300  
agtacagcaa tagaggaaat catgacaagg acaccagcga gtataaagga ataatgatct 360  
taatagggat aggagtatca gtggtaatag gaggaagaag atggctaaaa gaaggagtaa 420  
aagaatggat aaagagtaag gaaaaga 447

<210> 1387  
<211> 436  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-G6

<400> 1387

atggaagcta ctcgacagtt ggtagaaaaa ctaaagagag ctattatattt acaagaagat 60  
acaagctatt cggattcagg agatcaacaa cagtttgcca agtctgctag tatagatagc 120  
aatagtcatg aacatcgaag ttggaatagt gatggatcat ttaccgaagc aatggaagcc 180  
aaatatagca gaatagcggg gtttacggaa tattatccac tcaaacacga agactttgat 240  
gtcaattcta aaacttacaa gatTTTTcat attcacgagt acaattggtc ggatcacgga 300  
tatgctttga tcaatgcgtt ttatgaagat ggagaattgg cttctttatt ggataagcag 360  
tttgacatta ttaccactt gacagataac agtataggaa tgaatgctaa tgtagatact 420  
tctatctttc gtagag 436

<210> 1388

<211> 440

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-026-Q1-E1-G7

<400> 1388

cccacgcac cgcattttcc aagcaagtct ttgtttgcc atcaagtttt ttgggcaaatt 60  
attcttattt caaaaacgaa atatgaacat acagcaaacc attccctgtg tctccatcat 120  
agtggatacg tgttgccca gtatgctacg tcttggtcgg tctcgtgcca cttgcgacat 180  
tgcacgtct gtggactgtc caatttcaat tcgttggtcg ttaataggtg atctctgttt 240  
gtacgctttc aaatgcatag ctgaaagatt ggccaaacgg aaaacaaagt cttccagttg 300  
gttggcgcca gttgcccag agttgcgtga atgttttcaa tctcgacaac tacctaacca 360  
aacacaactg gaacagtatc cttgtcaaca ttcttctata ttgtggaaac tggccantan 420  
attatgaccc catgtttact 440

<210> 1389

<211> 456

<212> DNA

<213> Cyanidium caldarium



<223> Clone ID: LIB190-026-Q1-E1-G8

<400> 1389

cggggccacc cacgagtccg aatggatact tttttaatat ttgactccac cagtcaacga 60  
ttcgggtgctg ctgctgaaca cgtttatgac gtaaacgaga ataccaagtt gcgttttggt 120  
gggaaagttc gtcacggaga atcggacccg gcaggatatg tcattgccga atatgacttt 180  
acggttttcca aagaagattt tccgataaac gttcgtgcac gtgcgatatg taaaagtaac 240  
cagtgcacgc gcgatattcg tgccaaaaag aagtttgaag tggacgaaga cacttcttta 300  
ttcttcttag ccaaagcttg tactcaggaa ctaacaaaag gaagttatat tattggtaaa 360  
gctggagtga cacgtgactt tcgtttgggt gaagacactt ttcggttggg tgcggtgtgt 420  
gaccaagatg gaaactgtcg aggtgcttta agaaat 456

<210> 1390

<211> 429

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-G9

<400> 1390

cacgcgtccg gaagcatttc tgtaacattt ttcttttctt caaaaaaca gcgggacggc 60  
ttcctatggg gcatttgaat ggcattgtat atatgaaaca gaaacaagcc gggcctaaaag 120  
gtgaagagtt ggaacgcata caactctttc gcatgagcac ctggcaaaga acaaatggtg 180  
tccatttagc aaagtattga cttgacctta ctttgccagt caacaccaa caagcgttgc 240  
ttctagaaga gcccgccaat ttttgaattt aaaatgaggg tccacatgag aaatgccaac 300  
ctccccttgg ccattgtgat tgttcgtatt gttgttggag gtgatagtga ttactccaaa 360  
gtgtgggttag atgataactc ctagaaaaag aaagcaatct gaacgtgaag aaacacatgt 420  
tgacaacgc 429

<210> 1391

<211> 408

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-H1

<400> 1391

gtccgcaaac gcaaccgcaa cccgaatgtg gcaagttggc aagcaagtca gaaaaacaag 60  
agaggaatcc agtattccca tcgttccttt ttctgcaggt gtatacattg cagctatgat 120  
ggctcagatt gacattttga tggaaaaggg acatccggtt tcggaaattg tcaacgaatc 180  
cgctcatagaa tctgtagact ctctcaatcc atatatgcat gccagagggtg tttcttatat 240  
ggtaggataat tgttctacta ctgcaagact tggtagcaga aagtgggcac ctgcgtttga 300  
ctataacatt tctcagcaag catttcctgt tcttgacaat caagaaccgt tggacatgcg 360  
caagttggat gaattcttaa gtcacccat tcattcggcg gtattgga 408

<210> 1392

<211> 441

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-H10

<400> 1392

cacgcgtccg cagacgcgtg gggttgaatg aaagcaacca cagctttcct atgttgtctc 60  
cagaagagtc actagttgaa ccaagtgata tccactacag gaacagagcc tttgacagca 120  
cttcagaagt gtgtgattta cctccagctg tgagagcaac tgtggagctt ttggatattt 180  
taatgcatcc aatttttgat gatttatttg aagggtgttt acaagaggca ctgattaaag 240  
gagaagagtt gttcgaaaag tgttacgata aggaggaaga aggaattatc acaccttaca 300  
ctatttgttc acagtcgcgt atagtttttc cccgacttgg ctattcgcgt ctcaaatgta 360  
ttgaagttgt ttggaaactt gtttgttttc gttttgaatg tataaataat ttgttgtcct 420  
aacaaggcat cttatcgca t 441

<210> 1393

<211> 406

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-H11

<400> 1393

ccacgcgtcc gaattgtttc gacaatatgt cagactcgga taggacccaa caaaaagaac 60

aagcttgctc ctcggaagag aggaaaccac gaaagaaacg tgctcctcca ggagaatttg 120  
 ataggcaagt agaggcagtt cgtaaagaaa tgcaagcaat caaagagtca ctggaagaaa 180  
 cggagaggaa acttcaagag gcagagaggc ttcgtaattt acatgggtca gagtccaaag 240  
 aagaagaagg tgacgcgcaa cagacaggca cttcttcaga acagttgaaa cgttgaccgt 300  
 tgctagtgtg gtttttttgg caaagtcaga agagacacga atcttgtctt ttcataagcg 360  
 gattgactct cggcttacat agtataaggt tttggaaact gtgttt 406

<210> 1394  
 <211> 342  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-H12

<400> 1394

cacgcgtccg caaccacgc agaaagatga agcaaggtga tccgaagcaa cttcaaaaca 60  
 aacgcattgt cgtttggaaac cttccttctc acgtgagatg gcaagagttg aaagatcttt 120  
 tcaaggaatc gggaaatatt ctttggacag aagtgaagaa tgtgcgaaca aaggatggtg 180  
 gtgagacagt gatgggcact gttctgttcg aatccgagga ggacgcaagg agagctgtgg 240  
 agcgtatgag aggaagaaac tttttaggta gaattatcga ttgtcgattt gatagtcttc 300  
 gttgaatagt tgtagtaaaa tatagaaaga aatgcttttc ct 342

<210> 1395  
 <211> 404  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-H4

<400> 1395

ttgtatatcg tgtgaagctc gacagcgtct ctacacaaac acgcaagggt tcttggcggg 60  
 aaatacttgc gactactagg gtcgttactt taaagagaaa tgtgagagca ctggtcaagt 120  
 tttagtggac ttgtgagggg attgcttatg atagccaacc tgtggtgtca gttgtttatc 180  
 tggcggttaca ggaagacgtg tgacaggaga gctttccttt atcagacaag gcagttgtac 240  
 cgatcaaaca cttgtgacaa cctgactcga ttttactgat agatattccg ttcggttggt 300

tttgtactgc tcgtcaagtc ctgaacagag ctgggtttta gattttgatg ataaacagga 360  
cgactttctt gggttttgaa gtaacttttc cgtctccaaa gctg 404

<210> 1396  
<211> 443  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-026-Q1-E1-H8  
  
<400> 1396

cggaagtcca atgcacaaga gcgcccactt gtctttgtga caagacaaga aagttttctca 60  
gcagctcata gggtttgtcct acaagttttg ttaccaacga gaaccactca acgtaacgtg 120  
cttcagactg aatagttcga agctgacgga agaagaaaat gtggctattt atggaaagtg 180  
taacaacgaa cactttcacg gacacaacta tactgtgaaa gtaaccattc ggggtccagt 240  
acatccagat actgggatgg tagtgaacct tagttcgttg aaggaagcca taagagaact 300  
cattgtggag ctttttgatc acaagaattt ggacttggat gttttcgaat tctgcaaatt 360  
aggtattcct agcactatgg agaatctagt tgttatcata tggaagagat tattcagtcg 420  
gttcaaggac ttgctttacg aag 443

<210> 1397  
<211> 389  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-027-Q1-E1-A10  
  
<400> 1397

ctttttacta tatcgtgttg cgattctaga gcattctgcac agagagaact aaccatggat 60  
gatcatccgt tgggtgaaga gcaatatgat gatgaatgga taaagaagcc caaggttgct 120  
cacaagaggg gttgtacgaa cttgaccaac gaaagtattt tgaaagcggg gcagcagcta 180  
tccagaggcg aagctcacta cttacttcgg caacacgttt tgacaaggct cgagttgcat 240  
tctcatctcg tcaacttaat agagctgtgt caacaactgc ttgccaattc cgatggcgct 300  
cgtttagcct ctttgaatta tcagtgccac cacttttcag tgactagcga caagtcaaag 360  
ctcctgaacg ctttttgatt ttcccatgt 389

<210> 1398  
 <211> 332  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-027-Q1-E1-A11

<400> 1398

tcattggtgc gctccgttgc gtctccagct gcgaggttat tgggttggcg ggattatggc 60  
 tctcatgtat cgggatttgc gaatcgacca gtgctagtgc ataacagtac gtggcataat 120  
 tctcacattg cggcgggttg tagagtatta agctcaccag tcaggaaggc gtttcagata 180  
 tgctagtacc tgggtgtcga ttacgtgttg gtgatatttg gtggtgcgctc acggtatagt 240  
 tcgcgatgac atcagcacgt ttctatgggc tattcgaatt tctcattcgg ttgatccgac 300  
 agtgcgtcgg tgtgcctatc ttacagccgg tg 332

<210> 1399  
 <211> 382  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-027-Q1-E1-A12

<400> 1399

ctgtgaaaat gcagtaaact agcagtagga cggaaagacc ccataattct tgactagata 60  
 ggtttaggga ggagagagaa tcatgaagta gaggaggtgg ggtaagagat gaaagaccac 120  
 tgcatgagga taaggaatct aactgagtaa ggaaaataag ctttagctag tttggctggg 180  
 gaagtaaagc ctaagaaaga gtaaattagg caagcaaagg catgagagaa gtataatagc 240  
 agaagcatgc ttgaagaaaa agaaagagat ttcagaaagg gaagaaaagt cagctataga 300  
 gaacatgtga aggagaactc aaaaagagga gagcaccgaa cgatcgaaga agaaactttg 360  
 ggggtaacac gttaatgtgg tg 382

<210> 1400  
 <211> 225  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-027-Q1-E1-A2

<400> 1400

acgcgctccgg acangcgtgg gcggacgcga gggttcgagc gtttgagttg tcgatgaaga 60  
agactcacta accgatggaa tagcacaaaa gggagataat tgggaaccaa acctgggaag 120  
tcccaaccag ctggatccga aaggaaagca accaaatggg gccttacagt ggaccacgag 180  
taaaggtaaa agttttcccc cttggtttgg gggggtggtg aaaaa 225

<210> 1401

<211> 470

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-027-Q1-E1-A6

<400> 1401

ccacgcgtcc gcccatctgc aagagtaaca tctgatgag gcagttgcct atggtgcggc 60  
agttcacgct gctattttga ctggtgatgc cagtgagaac acgaaggatc ttttgttatt 120  
ggatgtgaca cccttgagtt tgggtatcga aactgcagga ggtgtaatga caaaacttat 180  
cgagagaaac acgactattc ctacgaggaa atcacagata ttcactacgt atgccgataa 240  
tcagcctgct gtgactattc aagtatatga aggtgaacgt gcgatgacga aagacaataa 300  
cttgttgggt cgttttgact tgacaggaat tctcctatg cctcgacgag ttactcagat 360  
tgaagttacc tctgatattg atgccaatgg tattttgaat gtgagtgcag tggagaagac 420  
tacagtaaga gtaataagat aactattacc aatgataacg gccgcttatc 470

<210> 1402

<211> 414

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-027-Q1-E1-A7

<400> 1402

tgtatgaggt tgaaaagaag accgcagaat atgagataag aaagtacccc agcttaagaa 60  
tagctgaagt tcatcggttca gactggaaaa aagaagagaa tggctcggca tacgactttg 120  
agtcgcaagc atttcgagtg ttggcgctcg acattggtgt atttgagaa cccaaggaca 180

aagatagctc caacacgcat gttaagatag caatgacagc acctgtttta tcacagccca 240  
taggggtccgt ggaaacacga atggacgaca gcagtctagc gtttatattt gccaaagagt 300  
atgcagagca acaagaacct ccacagccat ttagaccacg agttcacttg cgtantgtac 360  
ctgtcagaaa aattgcagcg actactttta gtggtactgt caatcgtgaa acat 414

<210> 1403  
<211> 476  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-027-Q1-E1-A8  
  
<400> 1403

gcggacgctt ggggtttcgt ttgtatttga gtggaaagga agtcaatatc gaccttgttg 60  
ctattttaaa gtgcttctta tattccttgg agttcatatg gtctattgta gtttttgcgg 120  
ttagtgcttc aaaggcaaag tcgccaccag gtacttgtca gtatggacca atgtccgttt 180  
gcaactttgg gatagcttgg ggtggttattg gctggctact tactatatta attattgtgt 240  
tggttgttct tcacgtggtg aaagacgcct cttttactcc cctaaaggag tgtatagcaa 300  
atgccgtcat ggcggtttgg tgggttattg cagctgttgt tttctctgcc aaagagcacg 360  
atcacgtcag tgaaactagc actacgatca cggcattttc ctggatgttg gctatacttg 420  
ctgcctgtag ctcagctctg gccttgtatc aatctcagag agagacggaa gatgat 476

<210> 1404  
<211> 481  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> unsure at all n locations  
<223> Clone ID: LIB190-027-Q1-E1-A9  
  
<400> 1404

gcgtgggtgc gatacnatta agagtgggccc tcccagacgg aagtgtttcc actttgcaag 60  
tggaacaaga cgctacagta gaccaattaa aagaaaagat ataccaagaa aagaagttgg 120  
accccaaac aaaacggatt cgtcttattt attcgggaaa attattgagc gaaggaactt 180  
caaagttagt agattgcaaa gtagaagatg gctcctatgt gcactgtgtt atctcagatg 240  
aagttgcacg tggctgtacg aaccacactc aggaaagaag cgaacgttta cagactcgca 300

ttcgcgtggc tgatccccag tcagagtatc gaggtttgga ccgtctccgt gaagcaggtt 360  
 ttaccgacga agagataact gttctgacgac gacaatttgc tcgtagtcaa ggtctcagcc 420  
 ctgagcaagt agaacaatata accgacttga gagaaataga ggaacgatgg atgggagatg 480  
 c 481

<210> 1405  
 <211> 392  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-027-Q1-E1-B10  
 <400> 1405

gcaatgcagg tttcttgaaa cgcgccatgt tccattttgc atatcagcga cagctggaac 60  
 gagtgaagaa tggctctcga tcgtggctta tggacaagtt agtattcagc aagataaagg 120  
 cttctgtctt ccctcgccta cgatttatgg tatcgggttc cgcccctctc tctgcagcta 180  
 cacataactt tttaaagggtt tgtttcatgg tcccagtact acaagggttac ggattgacag 240  
 aaaccactgc aggagtcaca atatgcggtc cagacaatcc tgcaggttct gtgggtggtc 300  
 ttttgctgt tgctgaaatc aaattgaaag atataccaga aatgaaactat acgtccaaag 360  
 caccggcgcg tccgaaagga aaggtttgtg tc 392

<210> 1406  
 <211> 474  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-027-Q1-E1-B4  
 <400> 1406

acgcgtcggg gcgaccgagc aagaagagaa gagagaatgc tgggtggagt agcgaaacat 60  
 gagaagggaa gtaaaaggta agaaagagga aaggttttacg agagaaggaa gtagaaagaa 120  
 gagagtgtaa ggccggcgtca taatagaaat ccgaaaggag tagaagaaaa gagagagaag 180  
 aaagaaaaga agagaaaagc cgtactgaag accgacacag gtactcgagg agaaaggaga 240  
 cccaaattaa ggtgagagaa tggacgataa ggaactaggc aaaaggatat ggtatctgcg 300



gtagaacata tgaaagaagc agcaccgact gtttagcaca aacacagcac tctgcagaaa 360  
agagaaaatg taaagtatag agtgtgcggc ctgccacata gtagagaaga catcgatgaa 420  
agtgcagcgc agtaaaagat gacgtataga gaatggcggc cctaacggta agga 474

<210> 1407  
<211> 437  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-027-Q1-E1-B5  
<400> 1407

tgctcgggtga gtgatcaaga tattattcctt atatgtttta tgtttggcac attttcctcg 60  
tggttcgatg gatagagaag ttgttcaaaa gatgggttcaa ttgattcggt tcgtccatca 120  
actcagcat cggtcgggtt tatcagcggg tgcgattcag actgccggtc taaagtctat 180  
tagtgcgaaa catttggtta tggcatatca gagccttcaa tttttgtctc aatatatgga 240  
tatgttactc gatgcactat ctacttgggt ggtaatcgat cctcatacgc tttccgactt 300  
tcagaatgta caaagagagt tgagagatca tcaagggtcaa atattggcga aactttgttc 360  
catcatgaac gaacgaatgt cctatcatca acagagcatc gagtcgatgg cttggaacaa 420  
cgattcgctg ttggaac 437

<210> 1408  
<211> 370  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-027-Q1-E1-B6  
<400> 1408

gggagtcgcc ttttttggtt ttggtgtacg ttatttcaga aacaatggaa agttggttgc 60  
aacaccttga aaaacaacta gaagaagcga aaaattgtaa tgataagcga gttgcagaag 120  
aaaaagttca agacgtgttg aaaagtagtt ctgaaatgtc caacttgctc gtttccgtgc 180  
tacctgaacc agttcgagga cattggcaaa aacaactgga aagggtttag aatgaaaaga 240  
cgcaaaaagg agtttgctgt tcctattgtg caaatatcat ttcgagtgac cgaatgacgt 300  
catgtccgct cggttggtcca gacaagtttt gcaataaaac ttgtttgaaa gaaggattgg 360

aagaacatag

370

<210> 1409  
<211> 421  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-027-Q1-E1-B8  
  
<400> 1409

ttactgcagc ctgtgccttg ggaatgacga gaaaggatat cgaaatattt tgcactcgac 60  
tggaagagtg ttttcaagaa gcttatgaga aattggcatt gcagaagaag gaagaatatt 120  
tatgagtaca tctttgggtt tctttcttta tccactctat gtataatttg cattgattca 180  
agaatgccaa tatatctgta tacaaagagt tccaatgaag aatcaaagtt atttgaaact 240  
tgaaataccg tatgtcctcg agatatcatc tgtattatcc agaataactc tctaaaatat 300  
catccaaaaa aaaaaaagtt gatccatctc gctatctttg tcattcatta tttacttact 360  
cgatagaaaa cggtccgtca agcagcgtct tttggattgg atatattttg ttccataaat 420  
g 421

<210> 1410  
<211> 183  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-027-Q1-E1-B9  
  
<400> 1410

acaataattt aaacaaagac tgcgtcagag tagtagctaa gtttgactcc ttaggggaga 60  
tactacctcc tgaactcgtg cgtgacggat aatgttttaa cacttttcca cgttgctggt 120  
ctcagccaaa tctcactggt gagcgataac gacgatatag ccgtttcagg ggctttgggt 180  
ttc 183

<210> 1411  
<211> 464  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-027-Q1-E1-C10

<400> 1411

aggaagtgcg aatgtggatg aaggactgcg aggttacttg accaaatatg attgtagcag 60

tgccgatatc aatcctatcg gtggcatttc gaaagttgat ctcaagtcgt ttcttcgttt 120

tgcttcgaag ccttttgaag aaaatggatt gggatacaca tctttgaaaa gtgttggtgga 180

agctcctcct actgcggaat tggagccaat tacctccact tatacgcaaa cagatgaaga 240

agatatggga atgacttatg aagaactaac ttggtatggt cgtcttcgta aattgggtcg 300

ttgtggacca gtgagtatgt ttctctactt gtcgcaggta tggagcatc taagtgtgag 360

gcaagttgca gataaggtca aatttttctt tcgtatgtat tcgatgaatc gtcataagat 420

gactacgctt acgccttctt atcatgctga gaattattct cctg 464

<210> 1412

<211> 127

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-027-Q1-E1-C11

<400> 1412

tttggatttt tcgcacctat gaaaaatccg cttttaatcc tttggtaaac aaccgaagcc 60

tggcaatgca aagtcccgtt tggccccgtt tcttggcaat tcgactgcgg ctgaactttc 120

gggggct 127

<210> 1413

<211> 306

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-027-Q1-E1-C12

<400> 1413

gattttatac agttacttga gttgttacat cttcaaatac cccaagataa cagtttatca 60

actccgatgt cctcgtttcc ttccttttcc aagtgggcga acaagcacag tggaaacatc 120

gactagtcgt cgtcgttttt cttgttgect ttcacgagac tcgagactgc agttttggcg 180

ctgtccatag cttctgtagt ttgtcgaagc attcttttag aaagtttttc cccaaatatc 240

tttgtattat ctatgtattg tgctcttagt aaagtattcg taagggattg gcagtgcaaa 300

ataaaa

306

<210> 1414  
<211> 612  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> unsure at all n locations  
<223> Clone ID: LIB190-027-Q1-E1-C5  
  
<400> 1414

gagttgctcg gtgatgatca agatattatt cttatatgtt ttatgtttgg cacattttcc 60  
tcgtggttcg atggatagag aagttgttca aaagatgggt caattgattc gtttcgtcca 120  
tcaactcacg catcggtcgg ttttatcagc ggggtgcgatt cagactgccg gtctaaagtc 180  
tattagtgcg aaacatttgg ctatggcata tcagagcctt caatttttgt ctcaatatat 240  
ggatatgtta ctcgatgcac tatctacttg ggtggtaatc gatcctcata cgctttccga 300  
ctttcaaaag gtacaaagag agttgagaga tcatcaaggt caaatattgg cgaaactttg 360  
ttccatcatg aacgaacgaa tgtcctatca tcaaaagagc atcgagtcga tgccttggaa 420  
caacgattcg ctggttgaac aatgggaact tencagtcct tatatgcagt ccatcgttcg 480  
agagttgttt gttctcgaca gaaatatcca caccttgggg atggcacgag agtggaatga 540  
cctgtctagt cgggataaat tctcntatgc ggaaaaattg acaaacgtat atgaaagtct 600  
aaagtcgatg gg 612

<210> 1415  
<211> 472  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-027-Q1-E1-C8  
  
<400> 1415

cgcccacgcg tccgctctcc cgttttgaat gcattcgatc agtgttcggt gcaacctgct 60  
tcttacgaca tgcctaactt atctcatctt cctacatgcg atatgtatct tgtatggttg 120  
ggtgaatcac ctcaagtcac gtcctcaagc tggtgtttcg tttggaaacc tcgtttcttg 180  
ggaaaaacta cccaaccagt ttggtgagaa cgagtggtc acttttcaac tggacgcaga 240  
cttgcaaagc ttgtggaatc tcaacgtcaa atatgtatat ctctatttgg ttgcggaata 300

ttcttcgccc cggttcccgt ggaatcaagt aaccgtttgg gatcgttatg ttgaacgagg 360  
 ttctactgtg ttttccgctt ttccgtatta caatacgttg ggtttgcaca attacgtgga 420  
 tacgctgaga aacgcaagtc tggtatttcg tccggaagcg gatatcattc ct 472

<210> 1416  
 <211> 248  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-027-Q1-E1-C9

<400> 1416

tccgcttttg aaaaacctt tctgattctg cgaagcctgc atgggtgtaat tggctcttat 60  
 ctgcttccaa ttctcgttat cttttgtctt tgcaggcgat gcagttggaa taagagagag 120  
 gacaatggga agagaaagct ttaaaggcat ggagagaaag cagtttggtg ggattgcttt 180  
 caatgaaatc caggccttgg gacataggac atacagtacg ttctccgctt gtcgatattt 240  
 agacagct 248

<210> 1417  
 <211> 417  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-027-Q1-E1-D10

<400> 1417

acgtgctgtg aagtgagaga acgtacgaga aagccaagtg aggaaaagaa ggcaagtata 60  
 gggcggcccg agaaaggaga gggcgtaaga cgtgatacag agtacgaaga aaagagaaga 120  
 gagctagaaa ggaggtaaaa gaagagtaaa aggactagaa gaggtacgga attcacgagg 180  
 aaggagcgtg aaggaaggag gaatcccaag taatcgagga agaaaaagct tccgtgaaag 240  
 cgtgaacgga ttttgtacac actgcccgtc aagttctgga agtgtgctag gaataagcag 300  
 gggaagtaaa aggtaagaaa gaggaagggt ttacgagaga aggaagtata aagaagagag 360  
 tgtaaggcgg cgtcataata gaaatccgaa aggagtagaa gaaaagagaa cagacat 417

<210> 1418  
 <211> 364

<212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-027-Q1-E1-D11  
 <400> 1418  
 ggggtgggttc ctttaggaag cagccaggat ttgttcgcct ctttaccttt tccaactatt 60  
 tcttcggttg gaagtaatgc agctattatt cactatcgac cgaatccaaa ggattgtaaa 120  
 cgattagata gtgaggatat ctatttgtgt gattctggag gtcagtatag agatgggtaca 180  
 acggatgtaa cgagaacttt acattttggt actccaacgc ctagagaaaa ggaatgctat 240  
 actcgagtat taaaaagtca tattcagatg gacactgcag tattttccaa aggaacgagt 300  
 ggatttgcgt tggattgttt gaaaagagct cccttatgga aaagttgggt tggactatcg 360  
 acat 364

<210> 1419  
 <211> 501  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-027-Q1-E1-D6  
 <400> 1419  
 ccacgcgtcg ggccagctat agaagctata agggcacaaa tcnctgggtgc gcctggaaga 60  
 gttgctgcta gacttgtttc cgttttcggt tcagctggaa gtggagatgt gttaaagggtc 120  
 caagagtatc ttaatatattg tggtatgcat cccactgcgc atttggaagg tagagaagaa 180  
 gaaacaaatt caacggaaga gacatcgtct gctgggtggta acgttcctcc atcgaataca 240  
 gatcatgaaa cgtcttcttc cgcaacgaat caggcatccg atcataccac aagagatagg 300  
 aaagatggaa aggagttgtc cgatgagcaa acggtagctt gtctcggaat tgcagctatt 360  
 gctatgagag aagatattgg aacagaaatg gcttttcgta tttatggcca tttgttgcag 420  
 tatggagacc ctgctgttcg aaagatcgtg cctctgtcgt tggggctctt aactgtgtcn 480  
 tatccacgtt tgcaagtgat g 501

<210> 1420  
 <211> 466  
 <212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-027-Q1-E1-D7

<400> 1420

ccacgcgtcg gccacgcgt cgcgccacga gtcggtaat ttggtttgtc gtcaaacaga 60  
agttgaattg gaaatacatg agcgaggaat agagcttgct ttggaagatt ttctccattc 120  
caaggatcgc gcaactcggtc gacaaataag aaaagtagaa catgtgccta gggagtcggt 180  
gatgcaacat tccaatatta caacacgtga ggcttggtgc gctgtggtaa atattgtttc 240  
cccaagtgtt tcttgatgat acaagtttgt ctaagaatcg ttgaggagtc taaccgattt 300  
gttttcacct tgttggaac ttatggatac aactcagagc tctcatgtgg tcacatcgaa 360  
gcaaagtaat agcctacgta gttggaacgc attgtttgca ttgaccgtac ctagtcggtc 420  
tgcaagttac gagtgccttg ctgctcagat tatcgatgca cgtcga 466

<210> 1421

<211> 575

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-027-Q1-E1-D8

<400> 1421

tcttgcgcat tgacaggtct tggcgcaatg aagacagtta ctttgatatg agtttctttg 60  
ccactatcag ttgcttgctt tttgtttcag tttattacct atcatattac ttgtggtttc 120  
tttgcgttca tagactatta taagcttctt ccagatcaga agctgcacaa ttcagaccac 180  
aaaacttata ctcaagttgct gcctcgagtt gtgtttaatc agattgtctt ttatctgccc 240  
agctttgttc ttttgcaagta tttgggagtt gcgttctgtt cctttgagcc caagatatct 300  
atgttgctgt ttgttgctga ttatcttttc tattctttcc ttcaagaaat tatcttttac 360  
agcggtcacg gattcctgtt acattccaag tggggattcc agttgttggg acatgaattg 420  
catcacacta ccaacggttc tgtagctgtc tcgcaacact atatggcccc tattgactat 480  
cttattgaga tagttattac caatatgctt cctttccttt tcatgaagaa aaccaatcta 540  
tattttgaga tgttcgtana tactctgaat acaat 575

<210> 1422  
 <211> 371  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-027-Q1-E1-D9

<400> 1422

gagatcaccg attttctact ggttctgttg tcaagttgca taaaattgcc gaacgtatcc 60  
 cagtggaaga aggtggtgag gaggtcgagt cggtacgtga ggaatacacc aacgtggaaa 120  
 ataatgaaca ttatacagcg aagcatgaag aataagaaat tgtttccaag tttgttcggt 180  
 ccaaggcagt acctggttct tcgaaagcat cgagtaaggg tatcatgatg ggcgaaaagg 240  
 gatgtacaaa gagtatgaaa actgctacaa acaaatgaag tactcgatct tccatgcact 300  
 cttgccaatg tcatttgttg cattcattgg aacacttcat tttgcaagtc ataaaacgca 360  
 ttttttctact c 371

<210> 1423  
 <211> 367  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-027-Q1-E1-E1

<400> 1423

gagaaaattc tcgagagtaa tagacatgta ttggataagc tggccactct gttgatggaa 60  
 caagaaacgg tgacaagtga agaactacaa ttattgctgg cagaaaatga agtgatcatg 120  
 atggactatg aggaaactcc aagtgcgcct attgaaagta gaaatatttg gcaganatat 180  
 aattctacac cgtcggtcgt agaaaatgga agtccttcaa aaataataga tagtgatgga 240  
 gacttgtgat atacaaaact agtctgcttc cacctttttt cggtttggag gagaactgtc 300  
 tgcaagtaaa acttcttcca atacaccgcg tggaaaagac gcttctggtt ggtanggctt 360  
 gttattt 367

<210> 1424  
 <211> 377  
 <212> DNA  
 <213> Cyanidium caldarium



<223> Clone ID: LIB190-027-Q1-E1-E10

<400> 1424

cttcgggggtt agaactgttc acatggcaac tgatggcgat tccaggcatt gattatcgag 60  
gagctcaaga agttgtatca tacggaattc gctctctgac agaacttga gagcagttgg 120  
atcgctactc aaggcgtgac gaaagaattg cgtggctgca agagatatct cgcaaatgcg 180  
gaaagaaaag gtggaatcgc agcttgtatg aaacgatgga agcgctatct tgctccattg 240  
gtgggtactta tccaccatag aacgaaacgc agcaagaagt atccgtcaca atgtttcttc 300  
aggttttctt ctaggaagat tctgcttggg ttgtagtagt attcacaagc aagtaaacaa 360  
cggactatly lclacaa 377

<210> 1425

<211> 318

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-027-Q1-E1-E12

<400> 1425

tgtggtatag agaatggcgg tcctaacggt aaggatctaa aggtagcgaa gtatatagac 60  
gtttgaaagg cgtccagtat gaaaggagaa acgagtgtag cactgtctag tctccaact 120  
cagcgaaaca gcaataactg tgaaaatgca gtaactatc agtatgactg aaagacccca 180  
taattcttga ctagatacgt ttatggatga tagagaatca tgacgtacag gacgtggggg 240  
aagagattaa acaccactgc atgatgataa cgaatctaac ttactaagga aaataatctt 300  
aatctacttt ggctgggg 318

<210> 1426

<211> 356

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-027-Q1-E1-E6

<400> 1426

aggatcgacc tgagtatcat gaagacgagt gggactatct gcagatcgca cgatcaagga 60  
catcggcgtg tgagaggggc ttgggtgagg attgcatgaa agtaggttga tgatatagt 120

gagtgtcctt accttttgc cagtgtgtca gcgactgtga gaggaagctt tctgttgcac 180  
 gtgtaagtcg tgatttaaga cacgatgcta cttgatctta tgctgtccaa tccaagtaag 240  
 gctagaacag tatctgtggg aaaagatttg gcacagatgc gatatggggg gaaacgccaa 300  
 tcatggcgat tgatatctgg tactcctcgt catctataga agtagcgtat gcacgt 356

<210> 1427  
 <211> 450  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-027-Q1-E1-E7  
 <400> 1427

ccacgcgtgg ccaacgcgtc cgcggaagag tgggacactg ggtagatttg aacaaggact 60  
 ttccaagccc ataaccgtta tcaaacggca agatcgagtt ggcttgggag ccgaacaaaa 120  
 gacagtctgg aatgacttgt ggtgggaaag atatctatcg gaagcaatca ggaagaatct 180  
 ccaacgtttt gaaagatcca cgacggaaaa aggtgaagac attgcagagg aaagtactgt 240  
 ctcacgaaaa gaacggagga ggaagaagaa aacaagtagt tatcgttcga agaaacgaaa 300  
 agaaagagct ataaaggaag atgggaaaaa acgaaaggct cgcagagata gataggatgt 360  
 attcgcaagg tttaacatca gtacgactag tgttgtttat atcgaaacga taactctttg 420  
 atgtagaagt cagtaatacc ggataaaata 450

<210> 1428  
 <211> 484  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-027-Q1-E1-E8  
 <400> 1428

cgcggtccgcc cagcagtcgc gagatgaagc gtgcatggca ctgggtcatgt agcaaccgct 60  
 ggttcgtcta ttacatcgcc agctggtcgt gtgattctct cttgtgaggt tagctccggt 120  
 atagcaaggt taaagccatc ttggaatcgt ccagacttta agtagattgg tagttcaaat 180  
 ttattttgaa aaaaagtaac gctaggatgg tttggctttc accttgtcgt tttttcttct 240  
 tgggttgcta ctactgtaac gcggtgctca gggaacctag aatgaatccg aaccaaacga 300

gcgaggtttt gctatgatag agtgataaga acgttgacgt ggacagacgt cttttgttcc 360  
 ttttcgttgc aacaagtaca aaagatcgtc acaggaaaaa catcttgtca ctgagtacaa 420  
 cgtgcatcgg tgcagtgcac tctacnagca caattctatt gataaactag tacaagacaa 480  
 caat 484

<210> 1429  
 <211> 221  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-027-Q1-E1-E9  
 <400> 1429

atttgtcata agactttcga gtctctatga ggaacatact gatcatggaa ctgtttgggt 60  
 aactatgacc cgaataggac atcgcaacgt atgtctgttt atctattcag agcctctttc 120  
 ttcggtgagg cgtggctggc tagaaacacc ctcattcggg gtgtctgata ggagcgacgg 180  
 atggcaactg gaaaatatct tgttttatcg tacgttcttc t 221

<210> 1430  
 <211> 276  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-027-Q1-E1-F12  
 <400> 1430

tgggaatttc gtcacaacag gacggtaccg gttttgcact ttttaggaga tcactcttct 60  
 tgtctgtatg attgctttat tgattgcaca gcagctgatt ttccggagaa gcctcaaaga 120  
 tttcgagtcg tatacaatct attatctatg acatattcat cgagaataag agtgcagacc 180  
 cacgtagatg aggtaactcc tatagagtca gctacttgtc tatttaaagg tgcaaattgg 240  
 gcataacgag aagtgtggga cttgtttggc gtattc 276

<210> 1431  
 <211> 492  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations

<223> Clone ID: LIB190-027-Q1-E1-F5

<400> 1431

ttacataagg cggagtttca nagaagatct agagtgtcaa tctgtcnctt ttttataggt 60  
atagagtgac aagaggggtg cgttaccaat acggcatgtc tgcgcactcg tcgactcaca 120  
aaaaaagaaa gactatggca aaagaccgaa tatgattcga caaagagtaa acatccgtgg 180  
aacttgtatt gtagcaaccg ctggttgatc gtttacatag ccagctgaac atgtcttggc 240  
ctcttgcgag atgcgctcnc gtagaactag gttaacaagc catcttggag tcgtgtaggc 300  
tttatgttga ttgttaatcc aaatgcaagg acggtttgga ttccacctcc ttgttttctt 360  
cttggattgc tctgtctgta ctgcggtgct aaaaggaaca agagtgaaag cgaacaaaaa 420  
aggcgaggtt tcgctatgac agagcgaata gaaagttgan atgaaaagac tgcgttggtt 480  
ctttccgtgc ac 492

<210> 1432

<211> 305

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-027-Q1-E1-F7

<400> 1432

ccacgcgtcg acaatgcac caccgncgag tcgccggacg tgtgggatcg attgatgcgg 60  
aaaacgttcg acgcgagatt gtcgtcagaa agataaagga accttttttc acaaccagta 120  
aatacttaca tggatataac atctttcata tcatatagga acttttcctg gggtacacga 180  
cagcccaact ttatatctgt cggaagcaa cgtacgaaag caacatatct gagaacagta 240  
aagtccaacc agttggtaga agtatcatgc atgttgaaat cgatcccttt tttccaaaag 300  
ctatc 305

<210> 1433

<211> 384

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-027-Q1-E1-F8

<400> 1433

tcatatatta gccaggagta tatggagagg ataagagaag agagtagggt gtatgtagga 60  
 atgagtataa taacaggaat gatatggagt aaagaagtgt ggggatcatg gtggataaat 120  
 gatgtaagga atataagcat gttagtatgc tggatatggt tggaagtaat aggaggagta 180  
 aagaaggagt acagaggaat aataagcagt ataggaataa taaatatacc gataataaag 240  
 tactcagtag agtgggtggaa taccttgcac cagccagtga gtataagctc atggggagga 300  
 agtataggaa gagaagaagt agaagaaata gtgaaggtaa taataatacg agtaatggtg 360  
 agtatagaga agaacatgat gaag 384

<210> 1434  
 <211> 292  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-027-Q1-E1-G10  
 <400> 1434

ttagggaggc ngatTTTTTg cctgangagt aggatgaaga ggtagacgtt gaggattatc 60  
 ctcaatcgcc acctttggtt cgagaatcac cggaaccac taaaaatgcg gtcaacgaac 120  
 aggaatccga tgcggttgca gacgaataga ttgtgcgtct acagaaacag aaggacatgg 180  
 agaggtttgc ttccttggac gaggaataac aggaacgcta tggctattat cgtatgggag 240  
 atttgatgat gtacagagtg aagacgctgg tctcagcgtt caatcctgcc tt 292

<210> 1435  
 <211> 379  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-027-Q1-E1-G11  
 <400> 1435

gtcgggatga agggcacaag tccggttaaa cgttaccgcc acaggttgggt gacaccaaag 60  
 caaccagtag acagataaca agaatttttg cttgttcaga agaaacaaac ataacacatg 120  
 cgtgggtggt tggtaaaaga acgcggttga gcttaaaactg ttaacctttg ttcttgtgac 180  
 agtataaaga gtcttattct tcgtagctcg gtccaaagcc gagttttcct gtcacctaaa 240

aattagacat tctcagctgt ctttgtcctt tttcaagggtg aatatatgat tacaccgagg 300  
 agctttttaca cgcancaaga acgacaaact ggtagaatgg tacttggtga acgactgcaa 360  
 actgtacagt caaaaattc 379

<210> 1436  
 <211> 477  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-027-Q1-E1-G2  
 <400> 1436

tatgttggcg tttacttgtc tcacagactg tcgttgggtta gagacttctc gattttctcag 60  
 atgtngcana gccaataccg tctcgttgcg acgtagtcc cagtgttcac actcttggag 120  
 gagtgtttcg atgaactaca gtcgctattc gataactacc gacaaatcag aaggacatat 180  
 tgttcccggg actttttcaa gatttgagtt tcttgaaggc cgagtcaccg gtccaaccgt 240  
 cttgaaccct agcatacttg actttacagt gtctaattgt tcagatgctg cttttggaga 300  
 atggagagca ttatcggtt caagtatagc anaagaactg gaacacagaa gaaacgtcac 360  
 aaagcgacaa tagaaagtct caagaagact cctaccgaaa agtcaaggct tacattttct 420  
 ggacaacttg aagaatttta tcgaaggaat ttaaagatat ttcaacgagc cgggtga 477

<210> 1437  
 <211> 329  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-027-Q1-E1-G3  
 <400> 1437

aagcgcaagt ctcgaaagaa gcctattcag aagacaaaa agccaacgtt ggacagagtt 60  
 ttcaactgtc ctttttgtgg acacgaaaaa acagtcgact gtactatttc caagtcaaaa 120  
 ggaattggtt ccgtttcgtg taaagtttgt caagcttcgt atactgcaca agtgactcac 180  
 ttggatgaag cagtagacgt gtacgccgaa tggatagata aaactgttca agccaatagt 240  
 tgacgacttt gttcattgtt gtgggaatat tccaacacca agtgtctgcc ataaaagtga 300

gtatctttca aagacaaaaa agacacggc

329

<210> 1438

<211> 506

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-027-Q1-E1-G5

<400> 1438

ccacgcgtcg agctgaattg tttccagtga gtatggcatc tataccaacg acacaaaagg 60  
cgctggaggt tggttcagttt ggagacccgc tgaaaggagc actgaaactt aacaaagagg 120  
ctccagttcc caagccaggg gaaggacaag ttctagtcca aatgaaatat gcctgtctca 180  
atccggcaga cgtattttaca gtccaaggaa tatacccagg agtcaaaaac gtagttgaaa 240  
agaaaccagg tttttagtga ggtctcgaag gtgcagggca agtggttagct acaggggtccg 300  
gttggtcatt gaaagttggg gctcgagtcg tacctttgct aggagaaaag gctgggttcgt 360  
ggcagcaata tggtgtgtgc gctgaaaagc aatgtgtgcc agtgcttgac gacgtcgacg 420  
atgcaacagc tgctcaactt tttgtcaatc ccttaacggt ggtaggtatg ctggatgaga 480  
ttcagcgcaa tgctcccata aaagac 506

<210> 1439

<211> 523

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-027-Q1-E1-G6

<400> 1439

gggcaaagaa aggccagtta atagatggaa aggcaattgc tgctgctata agagaagaaa 60  
taaaggaaga agttacaaag atagaagccg cggttggaag agttcctgga cttgctacgg 120  
tacttggttg gaatagaaca gactctacta cttatgttcg gatgaagcga aaagcttgcg 180  
aagaagtagg aatcgagtct tttcacacgg aacttcaga atctgtctct gaagaagaac 240  
ttttgagttg tgtcgaaaga ctcaattcag atccagcggg tcacgggata ctcgttcagc 300  
ttccactccc gaaacatatt aatgaggaga aaatcctttc agccatttcc attgagaagg 360  
atgtggatgg ctttcaccca gtgaacattg gaagattggc aatgaagtcg agaactccgc 420

gcttcgttcc ttgtacaacc agaggctgta ttgagctgct ggatcgaagc aacgtcgcta 480  
 ttgagggaaa gtgtgctgtc gtgttgggaa gaagcaatat cgt 523

<210> 1440  
 <211> 398  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-027-Q1-E1-G8

<400> 1440

accacgcgtc gcgcaatgca gcgtangaga ggaccaaata aggtgtggat agtaggaata 60  
 ggacagccaa tagcagatgg attgaagtta atgataaaag agggagtaaa gccaacaaga 120  
 gcagagggaa tgatgtataa agcagggcca gtagtaacat ggatgttatc gatgctagga 180  
 tggagtgtag taccaatagg agaaggaaa gtaatagtgg atatagaagt gggaataata 240  
 gcatggatga gtataggatc attgggagta tatggagtaa taatacgacg atggggaagc 300  
 agttcgcagt acagcataat gggaggttta agaagtggag cgcagatggt atcgtatgaa 360  
 ttaagaatgg gagtaatgat gatatgtata ataataat 398

<210> 1441  
 <211> 398  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-027-Q1-E1-G9

<400> 1441

gcaatcttct caatgagtcg tattgtttct ccttgtgcaa gttgccacgt ttcgtttata 60  
 gtccaagata tcaggttttc tttatttact ccacgtttcc aaagcaaata taaaacgttt 120  
 tgttttttgt gttgttggtc gaatagcaac agcgataacc acgagcaaga caacgaggca 180  
 cctaggacga acaagttggg tccaaggaag gacataagac gctgcttaat aacacgtgaa 240  
 aagcttccca aagaccaact ttggagaatt gtacgaacac gagacgaaaa tggaagatac 300  
 aaagttcagc tggataaagg aaaagggaac gtccgtatat atctcaaacg acatacaact 360  
 aagtttacga gctcaaacc gtgtaaaact gttgaatc 398



<210> 1442  
 <211> 53  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-027-Q1-E1-H10

<400> 1442

gctacaaagt ttttaacccgg tattttaacaa tttctcaaaa tatacagaaa ata 53

<210> 1443  
 <211> 400  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-027-Q1-E1-H12

<400> 1443

gagaaaggat accactgagt atcatgaaac ggggtggacac ggtcacacca atccccaagt 60  
 aagggttcct tttcaatggg gaattcgac aagttcccat ggccccctgt tcccacgaaa 120  
 caaatgaaat cctttgtttt caaagttctt caagtgggtt tgtacctgtg gagtttcttg 180  
 aggtgaaaaa agcacaaaga cttgaagtac cttgaagaaa cacttggact tgttgttcct 240  
 tattccaagg taatccaaag gaacacacca ttcggcaatc caggtatcga cgtcctttcc 300  
 tatccacaca aaactgctat agttttcttc cgtgacataa acgttatcca tgggaaaaga 360  
 tgtgtctatc caananaaaa aaaaaaaaaa aggcggggcgc 400

<210> 1444  
 <211> 284  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-027-Q1-E1-H5

<400> 1444

ccacgcgtcg gacgagctta attcttagag atngttgctg actagcagca ggagtagtac 60  
 aactgtcgcg gggagatgga ggagtgatca ccttatcccc cacggaggcg tttctgtcat 120  
 ccgtaacggc ctttctagcc taggaaaact gcttcgtttg ttgagaagaa tgtcagaaac 180  
 ttgtgacatt gccaaagtttt tggctattct gtatgctgct tgtatggctc gaataacgtg 240

gtttgctttt tttttactcg gataaagggtt tttgtttggt cttc

284

<210> 1445  
<211> 268  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-027-Q1-E1-H6

<400> 1445

cacgcgtcgc cgacgcgtcc gcccacgagt cgggttggct gtttgcaatt cgcttgtggc 60  
gtgtgaagtt ttggttacct tgaaataatg cagatatttg taaagacact tacaggcaag 120  
actattactc ctgaagttga gccttcagat actattgaga acgtcaagtc caagattcaa 180  
gacaagggaa ggattcctcc agaccagcaa cgtttgatat ttgctggaaa gcaactataa 240  
gatggtccta ctctttcaga ctataata 268

<210> 1446  
<211> 452  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-027-Q1-E1-H7

<400> 1446

ggaattccga attgaccacg cgtgggcgac gcgtccgcgg acgagtggga attgattttg 60  
tcatgtcgtc ttcaaagtag tctatcgaga cgttattgct aaagacgttt cctaaagaaa 120  
tccctacttc gtattgtctc gtgtatgcac ttttggtat tccggtactc gcgctcgacg 180  
tgtagttata tcttgccgta ctccacttga acttattgct tcaagcgttt cgttgatcat 240  
cggtactaca gtcggcttgg tgcttctagt tacgtcgtat cataaaactg catatgccaa 300  
gtggtctaag ctcgatcgca caacagagca accaaccaag agctctttca agggtaat 360  
gtcggcatat cgaagtggag ttgagagtca actatggctc ctggaaagat cctcggtcag 420  
ttacagtgtg atgataaaca acgcaatatt tc 452

<210> 1447  
<211> 389  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-027-Q1-E1-H9

<400> 1447

acgcgctcggg gacgcgtccg ggtgagaaca atatcgatca agtggttcatt attcgctcgcc 60  
atgaactttt tacaaaggaa atacatcaag ttactgcttg ttcttaacat tattttttatt 120  
ttctcactag tagggagtgg tcttgagcac ttcccaaacc tagttagaga gtatatgatt 180  
ctgaccccgaggagtagc tcaacttagc caagcagaac aagcagggtg tagacaagtc 240  
agtggtgccag ttattacatc aacagtttcc gctgttcaag cagtatcttc ttcttactac 300  
gatgggggca ttacagtca gtcataacct cacaataagt ttccaagtcc tgccttacga 360  
tcctgggcat ataccattac tccaacgtc 389

<210> 1448

<211> 568

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-028-Q1-E1-A10

<400> 1448

gagtcgtata acaaattgtac ctcgaaagcc attgcatatt ttaatgagta ccaaagactt 60  
gcaacattat tctcgaatat tttgtattgt atttgctgta gcacatgttc gctttcaaatt 120  
ggagcgggtg tggttcctct tgcgaaatgt attcagagaa tgcaatcgag tatctctcgt 180  
caaacacaga aatacattac aactactgag gatgtgcaat ttttgtattc attgtattga 240  
agaattcttc cagattgact tgattgaaga gtcctttgaa aattttatga aacaggcaag 300  
aggagcttct gactttgata cggttcattt gttgcataga aaatcttgat actcttgtcc 360  
atcatacttt gatatactct gcatccttca tggagtcgtt ggatagtctt ttgcaggtat 420  
tccgagaata ttgtttatac attcaacaca catttataga agacaaagct attgtccaag 480  
aactatctac ggaaaggaca cgaacattcc atgattcacg agcgtaaact tccgtttctt 540  
caagagctgc ancaatatct caatcatc 568

<210> 1449

<211> 491

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-028-Q1-E1-A12

<400> 1449

gccacgcgt ccgtgttttt tgcggacact tgaagacagt tggaattgga taaaagagac 60  
gaggggagca catacagaag agaagctttc cgaggagaat tttgtctgca atagtatgaa 120  
gcaagtcgtg actgacacaa tagacttgct agaaagagta gagcagagat gcatagaatg 180  
ggacaaaaag acagaaaagc tttcaggaga agtgaaacaa gaatatattgt cgtttttggc 240  
gccttttgtg tatcagcgtt ttctcgtgtg tttgtttact tggaacgctc tgttgattga 300  
atgttttcat tctaatttct ttgtagtcga aaccattcga gggtttgtta cactgactgt 360  
tggtgcccct gttttagctc ttgccgctag tctttcgttt gcgcattatt atcgacgcaa 420  
aagtatgccg atttttgcaa aggaagacac atttttcgag tgaaggcaca aggttttgcga 480  
aaataaagaa t 491

<210> 1450

<211> 435

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-028-Q1-E1-A3

<400> 1450

acgcgtctgc ccacgcgtcc gcagcatacc agagaggggtg gtgtgggttc gggagtgtgg 60  
tctttttgca agaataaagt catcgtaaag tgcgctaaga atactgataa atgtcacgca 120  
accaacaagt tgttgggtat gggagcacgg atagaacaag cccgcaagtg atgtgtagtg 180  
aaaacagtgg tgctgttgct ggctccttgc gtggcgccaa ccacgaagac caagctttgg 240  
tggaacactg gattcgaaaa gctttctctt tgttcgacca ggacggaaaa cgttatgtgg 300  
atagtgtaga ctttgcagac gatatccagc acttgtttcc caactgtaac gaacaagaag 360  
tcgaagagtt gctggaagac acggacctca acggtgttgg agttgtcact tgtgacaact 420  
tttgtcgcgc aatga 435

<210> 1451

<211> 412

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-028-Q1-E1-A4

<400> 1451

cagaatttga actttgcaga aatcgaaaag gctattcata aattgggtga acacgcgaga 60  
ttagggaaac taaccattca agatatgcaa ggcggtactt ttactatttc caacggtggc 120  
gttttcgggt ctctcgtatc cagcctatc ctcaatatgc ctcaaagtgc aatattagga 180  
atgcatgcc a ttcagaagag gcctgtagtc gtgaatgac agattgtcat cagacctatg 240  
atgtaccttg ccctttctta atgacatcgt ctagttgacg gaagggaagc ggtaaccttt 300  
ttaagaagaa tcaaaagttt ggtggaagac ccacgcaaaa tgttactcga tattgatatt 360  
tanactccgc aatatgagtt ttctaacgtc gccgacactt ggaaaataca at 412

<210> 1452

<211> 259

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-028-Q1-E1-A6

<400> 1452

atcttggcat tctcacttg gtgacgctgt ggngatggtc gacctgactg cacaaattga 60  
aacacacaag gtcacagtgg aagtaagagc ccctgaaagt ggaacgatat tggaagagct 120  
ggctaaagct ggtgatactg ttgcagtacg ggccgaaatc acgcgtttta caccaggagc 180  
tgtatccgaa cgacgtgaaa gtgaccacac gaatcggaga caccatcttc tatccaacac 240  
gtatcttcaa gccctgtat 259

<210> 1453

<211> 327

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-028-Q1-E1-A7

<400> 1453

atctaagaca aatatttgtg taaaagtttc tcttttgtaa taacattgct atggatactg 60

tgcgtcatct gaaacaccgc ataaggaata tcaattggaa aaatgtgaaa cgcactgctt 120  
 ccatagccaa agggaaggcg gtttccaagg tgaaggattt ttacatgacc gactttgaaa 180  
 accgaatacg taaagctact tctaatagaa actggagtat gggttccgta cagttggcag 240  
 agattgcccc gtgcagttat aaccctttgt tgtataaagt tatgatggat atcgtgtaca 300  
 gtcgtttaaa ggacaacgga cataact 327

<210> 1454  
 <211> 238  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-028-Q1-E1-A8  
  
 <400> 1454

actcatggcc atgctgttgg taatgtgtgt ctatagaaga acatgaggaa gaaagaggca 60  
 catacgggaa agcagtaaaa gaagaaagag aaaggaaaaa actgagtatc acgaagaaaa 120  
 gagggagtag atgaggaaaag aaagatcaag gaagtaagag taagagaacg agtaatgtga 180  
 atganagcac gaaagtatth gaagaagaga gtgtaaagcg cgtacctttt gcataatg 238

<210> 1455  
 <211> 458  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-028-Q1-E1-B10  
  
 <400> 1455

tcttttggga catctttcag gatccacaca ttgtccactt gtacggaaat tatgcagagt 60  
 ttggcatttt gtttactt gcctgtgacg cgagttgcac agttcctcaa ggtaagcgt 120  
 aaattgatat ttggaggaaa gcttcctgtt tgcgcaaata gatatagatt ggtcttgcca 180  
 caaaacacac tcatgagcct ggagaagggc agaaaggcac cgagtgatga agaactacga 240  
 cagaaacttt cgagctttga atatcacgtt ttaagggaag gaggtacaga acgtgctttt 300  
 actggagaat attgggattg tcacaaacag ggaatttatg agtgtcgtgc gttgggttac 360  
 cccacttttc caagtcagat acaaggtacg actctggttc acgaaggccg tctttttttg 420  
 cccaggtaa gaccgatgca gtaactactc gcacagac 458

<210> 1456  
 <211> 457  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-028-Q1-E1-B11

<400> 1456  
  
 tacaacactc gatcgtgagt cgtatagaga acanaactgt caaacttggtg agtagtgata 60  
 atgaagtttt tgaagtagac acaagcattg tatccctttc tgaacaata aaaaacgtct 120  
 tggaagacac ggaggatata gagagcattc ccttgccataa tgtggaagga cgaattcttg 180  
 caaaggttat cgagtattgt agatatcact cactcttaaa gaccattccg cagtctgagg 240  
 aggatattga gcgctgggat agggaattcc taaatgtaga tcaaccaacc ctttttcatt 300  
 tgattctggc tgcaaaactat ttggatatca agagcttggt ggatttaact tgtaaacgag 360  
 tagcagatat tatcaaaggc aagaagccgg aagaaataag aaaagagttt aatattgtaa 420  
 atgattttac tcccgaagaa gaagaagaag tacggag 457

<210> 1457  
 <211> 524  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-028-Q1-E1-B12

<400> 1457  
  
 ccatggcgaa aggtagacta caggatcgtc ttgagaagct tctgccttat aatcagacct 60  
 ggtattttta tataaccaag atagtatttt acgtatgcac ttttattttc tctgtcgtca 120  
 ttgctgctct ggtagtaac gcagagttta atatatttga taaatcccca ccgaatattc 180  
 atggagactt ttgtgcatc aaggcgtcac tagctgagcc agctggcgtg actgccattt 240  
 gcaagtacct catagcagta ggtgctcttg gccttggtgt tgctataggg tttgttgcatt 300  
 tctctctatg gacccttttg gcacatcgag tgattgattt atggtgggtc gaagccttgt 360  
 tgaatacctt ttggatgggc tgggtggttta tagcagctgg agttgctact gcagccaggc 420  
 cttcaaccgg tattcttgat gcggccaatg atcgttcagc tatcaatgca gttgaagctg 480

ttgcctgggt caacgcagtg ttgtatctct tcaacgtatt tctc

524

<210> 1458  
<211> 466  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> unsure at all n locations  
<223> Clone ID: LIB190-028-Q1-E1-B3  
  
<400> 1458

tggttaagcan acatgggagc ctacaagtat atgcaagaat tgtggagaaa aaagcaatct 60  
gacgttatgc gctttttact ccgcgtccgt gcttgggaat atcgacactt gccttcggtt 120  
caccgagctt ctcgctgcac tcgtcacgac aaggcaagaa tgcttggcta caaagcaaag 180  
caaggttatg taatctacag agtgagagtc cgtagagggtg gtacgaagag accagttcca 240  
aagggtatcc aatatggcag acctaagaat cagggtatca cacaactaaa attcaggaga 300  
aataagagat cagttgcaga agagcgagct ggaagaaggt gcggaaactt gagagtccta 360  
gactcttatt ggatcaatca agacggtatt taaaaatatt atgaagtgat actcgtcgat 420  
cctactcaca aggctattcg aagagatcca aaatacactg gatatg 466

<210> 1459  
<211> 422  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-028-Q1-E1-B4  
  
<400> 1459

tcgcttttta tgaaagcggt acacgacaaa gcagagaagg agtctatcat atacgcctct 60  
atacgctcca gcggttttcca tggtagatga cactattcct ccagcttcag acgcgaatca 120  
agacagctaa cttgatagtc gttccgcttt ggtcgatttt tttgagagcg cagaggttcc 180  
cgatcagacc gtcagaaaa atggtatacg atatagacaa gtacgatttg cagacaagac 240  
caactttgcg gaacaattca cgcaaagttt ggaagagaaa ttgcagtcct ctcaagtttg 300  
gattgaccag cttcaagagg aaaatcgacg actgacagaa aagttgggtca taatgacaga 360  
tcaacaggaa atgaaagatg aagttgagct catgacgttg gaaaacagtg aacttggtgc 420  
tg 422



<210> 1460  
 <211> 293  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-028-Q1-E1-B5

<400> 1460  
  
 attaccgaga aggataacta ttgccggaag gaattcttta ttttatccga gaaggcaacg 60  
 agtagaaaat caacanaacg aagcacaaca gaacggcacg gtggagcaag caaaggctgt 120  
 tactcaaagc tcatcaaact gtacagacgc cattccagaa agagaagtca cngacaagga 180  
 aaatcaaagt ctcatctcac ctaactggta ggagtcacgt tccatgaaac ccagccacaa 240  
 gatcatcaag atgaacaatt caattcgga ctaaagtatg acaacaaagc tgc 293

<210> 1461  
 <211> 378  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-028-Q1-E1-B9

<400> 1461  
  
 atttgcaacc gaagttgctg gaggaccgga ttgggaacg acgggacgtg gaagagatac 60  
 agaaataaat acttatgttg aaaaagtatt tcgttcagaa ctttcaggaa atgtgattga 120  
 cttgtgtcct gtgggtgcgt tgacttgtaa agaatatgtt ttttcctctt gtgaaaatca 180  
 ataaaaccaa ctagcatttg ttacaagcct tggaaaaaaa aaaacaacaa aaagaagaac 240  
 aaaaaacgac gacaaaagaa ctagcacata gcagaagaaa agaagaagcg aacatctgaa 300  
 ggtaacggag agtaggtgct aatggaaact gtccaccatc caatgaaaaa gggggggggc 360  
 cccaagggg ttaacgtt 378

<210> 1462  
 <211> 556  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-028-Q1-E1-C10

<400> 1462

ctaccaactg tttagctcct ttgactaaag ttatcaatga taaatatgga atcctggaag 60  
gtttgatgac gaccgttcat gcaactactg ccacccaaaa gacagtagat ggaccttctc 120  
acaaggattg gagaggagga agaggaattt tgaataacat tattccatct tctactggag 180  
cagccaaggc tgttggtaaa gttattcctg aactgaatgg caagttgacg ggtatggctt 240  
tccgtgttcc ttgtccggat gtttctgtcg tcgatgtcac ttttcgttta aagacaccaa 300  
ccacttatga cgatatcaag gcaacgatga aagctgcgtc agaaagcaaa gctttaaagg 360  
gaatattggc atataccgaa gatatggtag tttctactga ctttgttcac aatagtcatt 420  
cttcgatatt tgatgcgaat gctggaatta tgttgytgya aacttttgyt aacctgattg 480  
cttggtatga taatgattgc ggctactcca atcgtgttgt acatttggtg caacatatgg 540  
cgacagttga tgggtg 556

<210> 1463

<211> 488

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-028-Q1-E1-C11

<400> 1463

tatcatgaca tatagtgaga aacctgatta tgagaagtgt gtcgctatcg ttgcgaatgc 60  
tgcactgaga cagatggtcg cacctggttt gttagttggt gttgtccctc tttttgtagg 120  
gttccttgct gcatggattg gaagagtctc aggaaaatca ttgttgggag tacaagtttc 180  
tgcaggcata ttaatggttg gaacgatcgc tggattctg atggcacttt tcttgaataa 240  
tagcggcggg gcatgggaca atgccaagaa gtatattgaa acaggtgcat atggtggaaa 300  
aggttccgag gtcataaag ctagtgttac tggagatact gtgggtgatc cttttaaaga 360  
tactgcaagg ccttccttac atgtcttggt taaattacta tccaccctca cactggtggt 420  
tggtccgctg ttcttgactt cggcgggaat aaaagtcatt tctggctaaa gggcattacc 480  
ctacatat 488

<210> 1464

<211> 558

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-028-Q1-E1-C12

<400> 1464

ttcatattcc tttgaacaac ttgggaatga cgcaagctcg tttccaagtc tgcaattcga 60  
gtctttcaga atatggcgtg atgggttttg agttgggata ctcttggaag agtcctaata 120  
ttctagtgat atgggaagct cagtttggag attttagtaa cggtgctcaa gttatcattg 180  
ataccttttt agccgcagga gaaaggaaat ggagacgtca atctggactt acgctattct 240  
tacctcatgg aatggaaggt caggggtccag aacattcttc cgcacgattg gaaaggtttt 300  
tgcaattatg tgacgatgat cctgatgtaa tacctgaaat gcatactgat cgaactcgac 360  
aaattcagtt gtgcaatatg caagttgccca attgttcgac acctgcaaata ttctttcata 420  
tacttcgtcg tcaaatacac agagagtttc gcagaccttc ggtattgatg actccganat 480  
cgttattgcg acatcctttg tgtaagagcg atttggcaga ctttcttcga acaagttggt 540  
tcaaagagtc atatcgga 558

<210> 1465

<211> 488

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-028-Q1-E1-C3

<400> 1465

aatccgaaag gagtataaga aaagagagag aagaaagaaa agaagagaaa agccgtactg 60  
aagaccgaca caggtactct aggagaaagg agaccctaat taaggtagaga gaatggacga 120  
taaggaacta ggcaaaagga tatggtatct gcggtagaac atatgaaaga agcagcaccg 180  
actgttttagc ataaacacag cactctgcag aaaagagaaa atgtaaagta tagagtgtgc 240  
ggcctgccaa atagtagaga agaaatcgat gaaagtgaaa gcgagtaaaa gatgaggtat 300  
agagaatggc ggtcctaacg gtaaggatcc aaaggtagcg aagtaaatac acgtttgaaa 360  
ggcgtccagt atgaaaggag aaacgagtgt agcactgtct agtcgtccaa ctacgcgaaa 420  
cagcaataac tgtgaaaatg cagtaaaacta gcagtacgac ggaaagaacc cataattctt 480  
gactagat 488

<210> 1466  
 <211> 131  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-028-Q1-E1-C6  
  
 <400> 1466  
  
 tgattggaac ggctctggtt gtcacaccaa cttttctaca aagccgatga gagaagatgg 60  
 cggttacaag aagtatattt tgccacgtga tggaaaagtt aaggcaaaac ataagggaca 120  
 catcaatgca t 131

<210> 1467  
 <211> 434  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-028-Q1-E1-C9  
  
 <400> 1467  
  
 gagtcgtata gacaacngtt cacagcngcg agtgtaccag ctcgttgccg actgctgttg 60  
 gatcttcttc ttgtatgttt gccagcgtcc agcggcaagc agttgacatc agattgctgt 120  
 agaagttcat gtccgtaggg agtgtatgag acttagtgcg gcttgcatga cacattgagg 180  
 ttggtatata gccatttgag aagctgtatc agtgggacaa ggtccacttt gtcgtcagct 240  
 actttcttgt ccagatatct tgtcacagta acagacattt taaggagcac actgttttcc 300  
 gacagtcata atcattcgat gaaagcatcg tgattgacta tttttagggg aacggtgaat 360  
 cttcatacag gagacacttc gctgattgaa tttgtgtcca ctggtgtatt tcgcacggtc 420  
 atcagaacag cttg 434

<210> 1468  
 <211> 287  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-028-Q1-E1-D10  
  
 <400> 1468

cggttggaat aggaaacttt tcaaccagaa atcctctaga ctgagattcc tgaacaaata 60  
aatcaattcc agcacgactt tcaccaagga cttcatagaa aaccccgttt ggtttcaaga 120  
aaaactcaat ggtattcagt aacggcacca catgaaaatc acagtaagtg agttcacttc 180  
ctaaaacaag gataaaagaa acaagttttc tgatataaaa aaaaaaaaaa aaaaaaaaaa 240  
aaaaaaaaaa aaaaaaagaa agaaaaacaa caagaaagaa acaaaca 287

<210> 1469  
<211> 71  
<212> DNA  
<213> Cyanidium caldarium  
<223> unsure at all n locations  
<223> Clone ID: LIB190-028-Q1-E1-D11  
<400> 1469

gagtcgtata acatagnctt gctgttggtt tgtgtgtctt ngngnntct ttgtgggntt 60  
cgggggccct t 71

<210> 1470  
<211> 577  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-028-Q1-E1-D12  
<400> 1470

cacttgggtg cacgaggtgc tccgaaaaac aagtgggtggg aatattgttt ggaagactcc 60  
ttgacgtca ttgcaagggt gctcaagtc gcagccattg tgtatagaaa tacttattac 120  
cagggaaagc aactggaagc agacttgaaa ctagatatgt ctgcaagggt gacaaagatg 180  
atgggttttg agaatcccg gtttgatgag ttgatgagac tttatttgac tattcatgcc 240  
gatcacgaag gtggaaatgt ttcagctcat tccgttcgtc tcgttggttc cgcactttca 300  
gatcctttct tgtctttttc tgcaggaatg aacggtctag ctggacctct acacggttta 360  
gccaatcaaa atgtacttac gtggttactg caagtaaagg aaaagttggg tgggtcaagct 420  
cccacaaagg aaaacctaac aaagatttgt tgggatactc tcaactcagg caatgtgaat 480  
cctgcctttg gacatgcagt tttgagaaga accgatcctc gttacatgtg ccaacgagag 540  
tttgctttga aacatcttcc gagtgatgaa attttcc 577

<210> 1471  
 <211> 420  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-028-Q1-E1-D4  
 <400> 1471

ctctcgtgcg atgatgaaaa cactcctaata tcgtcagtga atacacagaa gcagaacact 60  
 tttaacagag ctcaattttt tacagctggt ttcactcaac tttctaacta ttctacgatt 120  
 tgataaaatt gctgcagtaa cagaaacaag tgctgtggaa aagaatgcgc tcacggaaac 180  
 catttcggag ggtctgtcga agattctaac gagaaaagga tggaaccact gtgaaagcac 240  
 cacgaacgat actaaaccaa aaccatagtc ttctacaggt atgaagcacg ctgaacctct 300  
 atcggaagac gatgaacaca ctgctgaagc ttgattgac aagttacaag cgcggcagca 360  
 acctgaacaa aagcgttgat tcacgatcgt gtgtctgtgc tttctggaaa ataacttggt 420

<210> 1472  
 <211> 540  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-028-Q1-E1-D9  
 <400> 1472

gactgctctg agttgcctct ttctctcttt ccttatcgt gccgcagttg cagccgacgt 60  
 agtttcagag gagagatggg gatatgctca gcaaaccxaa caacagcaac agtgccaaca 120  
 agtatgtaaa cagtatgcat actatcagag tccagtctgc acttccgtaa ccacacagag 180  
 ccataactgg acccaatgct cgaagactgt gcaaaccttt gtcccaagcc agtgcagtac 240  
 ttatacccaa tctctacat ggacctattg cagcacctac accaccacta gcgtaccatc 300  
 tcaatgcagc aaggccgtga ctacctatac tcaaacctgc tgtgcttatg cncaacaaac 360  
 ttctatgca gtcagtaccg agcaatatgt tcaggaaact gtatctgctc aatatacttc 420  
 ttactacggc gaatcactct ccagctatta ttaccgagca gctgctcctc agagatggta 480  
 tgacgaacaa tgcacctcat actgctgggt tccagtacag acctatgaaa cttatcaatg 540

<210> 1473  
 <211> 265  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-028-Q1-E1-E1  
  
 <400> 1473  
  
 actgaccagt agatcagaga gtacacatgc aagtaggtaa agcgaacggg tgactaaaga 60  
 ggtgtgaaag agtgaagat catgaaagca cagaataatg taagaaatgg ttagagtaaa 120  
 aaccatacag gaagtaaaag cgggaatctg acaggaggaa agccacattg gcactgagaa 180  
 aatgtccaga caagagaagt cagcactggg gaacattggg caatgtacag ggaagtatga 240  
 ctactcatg aggagtggag taaac 265

<210> 1474  
 <211> 121  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-028-Q1-E1-E11  
  
 <400> 1474  
  
 ggccgcccctt tgttgttgtt ttttgttctt ttttttcttt tttgttgctt ctttttgttt 60  
 ttttttttgt tttgttttgc tttctggcgt tgttccgtct ctttttgtcg ggtttcggcc 120  
 c 121

<210> 1475  
 <211> 435  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-028-Q1-E1-E12  
  
 <400> 1475  
  
 gagtcgtata aaacaactgt gcgtgtgaac cctaacaatc ccatttctct ttctagtgtc 60  
 aaaactgcat cgctacaatt gcattttgtt tgtttgaatg acgtgataac tttatctttt 120  
 ctgtaccgac cacttgaatt ttcattgggtg aagaaatgtc gaaagccaca gttgagacgt 180  
 gcccaaggct tcaactgtata tcacgcaacg agcattgtcg ttgtattggc attatgtatt 240

gcagctttca gtggatattt gttttatcga cgcacgaaac gacagtcaag actctctacg 300  
 acaaagggag actacaggcc tcttcgactg aacatgaata attttaacta ggcaagaatg 360  
 cggtttattc atttgttcct gtatttggtg gatattcttc actcaaacac tctatataaa 420  
 attctctttt tggtg 435

<210> 1476  
 <211> 325  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-028-Q1-E1-E3  
 <400> 1476

gcggacgctt gggaaagagg cacatacggg aaagcagtag aagaagaaag agaaaggaaa 60  
 aaactgagta tcaggaagaa aagagggagt agatgacgaa agaaagatca aggaagtaag 120  
 agtaagagaa cgagtaatgt gaatgaaagc acgaaagtat ttgaagaaga gagtgtaaag 180  
 cgcgtacctt ttgcataatg tctcagcgag tgacagagga agcaaaacga aagacaacga 240  
 agtagccagg taagacccga agctagttga tcttatgctg tccacgcgaa gtaaggctga 300  
 accagtatct gtggaaaaag atttg 325

<210> 1477  
 <211> 281  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-028-Q1-E1-E5  
 <400> 1477

cggacgaatg ggcagacgct tgggatcagg aagaaaagag ggagtagatg aggaaagaaa 60  
 gatcaaggaa gtaagagtaa gagaaggagt aatgtgaatg aaagcaggaa agtatttgaa 120  
 gaagagagtg taaagcgctt accttttgca gagtgtcgca gcgagtgaag gaggaagcac 180  
 aaagaaagaa aaagaagtag ccaggtgaag cgcaagcta gttgatctta tgctgtccaa 240  
 gcgaagtaag gctgaaccag tatctgtgga aaaagatttg g 281

<210> 1478  
 <211> 93  
 <212> DNA



<213> Cyanidium caldarium

<223> Clone ID: LIB190-028-Q1-E1-E6

<400> 1478

cttgttatca aatttcatgc tgtcaggaat aaaagtctta gtccagtaaa agcttgccga 60  
atcgtcatcc tttctactct tgtcgttctg taa 93

<210> 1479

<211> 129

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-028-Q1-E1-E7

<400> 1479

gcattctttg tcttagcact atgcgccgtt gcaattcaag cttctcctct agaggacact 60  
ttgggtgcct taatgcgggg tggttatcaa tcgcaaagcc aagcaccaaa acctagctgt 120  
tgcaagttg 129

<210> 1480

<211> 365

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-028-Q1-E1-E8

<400> 1480

tgggcattgt gggactgaag cgaccttcta tgtgtatggt gcgcttcaat acgaagattc 60  
aattaatcga cggctttcat ggtaacttg ctttacgcat tcctttgtgg gtagcagagt 120  
tgacggttgt tgggtggagat acgacagcag tccggaaaca gatacaggtc gaacaatggt 180  
gagtttcttg aaagtacaaa tgtcgtgtcc atgaagttgt ctaattgcgt gagaaaagac 240  
aatgttgtgt tatgaagttt cgtaaatact tcatgtgtgt tgtgttgttt tgccacagaa 300  
acgatgtttc gtcccttggtg gcgtttgcat tgtccaataa atgacaccat ttgtgtatac 360  
aaaac 365

<210> 1481

<211> 427

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-028-Q1-E1-F1

<400> 1481

tcgttganat ataatgtcct ttcttttctt ttccacatag gtctaacc aaagtcacgga 60  
aaaacatttt gaagcagacc tgtcgaattt tccaagccca ctagtctata gtgagacaag 120  
tttatcattc ttcgtggcgt ccttactatc gaggatgagt tgctttgaat tgcaacgttc 180  
tttctcctca gaacttgaac cggagcagac tgttgggtcca gaacaggaca cgacagtcac 240  
tccttangaa atatgtttca gaacaatcta taagatggcg actcatctag gccctctgta 300  
ttttgccaca agagtgtttg acgagattga atgggaacaa agttctattc acatagttgc 360  
tgcaactttg tgccacncaa gcacaggac acagaacacg aaattttgct anttcagaaa 420  
caagaat 427

<210> 1482

<211> 368

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-028-Q1-E1-F10

<400> 1482

gcgtttcagg cagtcaaata cctatgatag gttttggtac ctggaaagcg gaacctggtg 60  
ttgttggaaca agcagttgat tgtgcaattc agactggata tcgccacatc gactgtgcag 120  
cagcttattg taacaggagaa gagattggaa aagtgtttca aaaggtcttt tctagtggaa 180  
aatgtaaaag agaggagttg tttgtcactt ccaagttatg gaatacttgt cacaagaagg 240  
agcacgtgat tgctgcttgt aagcagactt taagtgactt gggactagaa tatctggatt 300  
tgtatctcac gcattggccc atagcttttg aatatacggg acttcccata acaggagata 360  
atgcatg 368

<210> 1483

<211> 508

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-028-Q1-E1-F2

<400> 1483

gcgtggctac caacgaaatg cttcgaggag ctggaagcaa gctttgatcc ggaggtaccc 60  
gaatgaggca actctttata ctgtctactg aatatatagg taggcttaga agcagcaaac 120  
cagagaggaa agcggttaaag catgaaagaa aagaaatccg aaaaagaaga gaaaaaggta 180  
agaaagagga ccgaatcagg gtaagaggta gaggagcaag aagagaagag agaattgctgg 240  
gtggagtagc gaaacaagag aagggaagta aaaggtaaga aagaggaaag gtttacgaga 300  
gaaggaagta gaaagaagag agtgtaaggc ggcgtcataa tagaaatccg aaaggagtag 360  
aagaaaagag agagaagaaa gaacagaaga gaaaagccgt actgaagaac gacacaggta 420  
ctcgaggaga aaggagaccc acataacgtg agagaatgga cgataacgaa ctacgcaaaa 480  
ggatatggta tctgcggtag aacatatg 508

<210> 1484

<211> 364

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-028-Q1-E1-F3

<400> 1484

ttcgtgtctt actccgtacc tgcaagaaac ttaccggctt tggcacgtaa cttttccaat 60  
gtctgtctct cgatgagtgg tctgagaggg ggatgtttac gaaatgtgaa agttttcaac 120  
cacaaacgac ctgcaagggtt gttatctacg acaatgacag gaggcgacca tgaaaggaga 180  
gaacttagtc gtcctatgcg tacgcttgat tccgctttcg acgaactttt agcttttgcg 240  
caagatccct ggtcaatgtn tcgctctcca tggagtctgt cgcccataag tatggcagta 300  
gacacgtgga tgctcgtgt tgacttggtg gagaacgaag atggctttta tgcatacgtg 360  
gaac 364

<210> 1485

<211> 277

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-028-Q1-E1-F5

<400> 1485

aacgcgtccn gccacgcgtc cgctcctgta agcgttcgaa tagcgacagt ggaacgctct 60  
actgttgttt tctttgattg ttgcagctat cgttgacta ccgtggcatc gctttctanc 120  
tcttgagatt cattttggag cagtggagat tggctgcttg attgtgtggg attgtaaaag 180  
acggacgtta cttgtatgtc caacaacanc aacaacaaca agtcttcttc ttctaaagag 240  
gactgtgggt cattgtggaa aaccttttca cgatgtg 277

<210> 1486

<211> 371

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-028-Q1-E1-F6

<400> 1486

gagaggagtt catcatgata aagcccgacg gagtacacag acaactgac ggagagatca 60  
tctctcggtt tgaacgcctt ggctacagtt tagccgccgc acaaatgatg actccttcgg 120  
tacaacttgc aagcagacta tgagacacga cggaacatt ctttgcaaca ttggtgaact 180  
ttttgacctc gggctcctgtg tttgactgg tttgggaagg aaaacatatt gttgccacat 240  
gcagaaagat gattggaaaa accaagccgc ttgattcaga accaggaacg atcagaggag 300  
actttggact ggacgttggc agaaatatta ctcatggaag tgactccgtt gatactgcta 360  
atccgtgaat c 371

<210> 1487

<211> 494

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-028-Q1-E1-F9

<400> 1487

tgagtcgtat aaacacagga gtatttactg ctgcagataa agctcgagca catatgaagg 60  
gaggtgctaa gaaagtaatc atttctgctc cgtccaacga cgctcccatg tttgtgatgg 120  
gcgtcaatga agacaaatat acaccggaga atactattgt atccaatgca tcctgtacta 180

ccaactgtct agctcctttg actaaagtta tcaatgataa atatggaatc ctggaaggtt 240  
 tgatgacgac cgttcatgca actactgcca cccaaaagac agtagatgga ccttctcaca 300  
 aggattggag aggaggaaga ggaattttga ataacattat tccatcttct actggagcaa 360  
 gccaaagtgt tggtaaagtt attcctgaac tgaatggcaa gttgacgggt atggctttcc 420  
 gtgttcctg tccggatgtt tctgtcgtcg atgtcacttt ccgtttaagg acacaancca 480  
 cttatgacga tatc 494

<210> 1488  
 <211> 542  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-028-Q1-E1-G10  
 <400> 1488

gagtcgtata tacaaaaata agctctatgt tgcataatgga cttacggagt caacagctcc 60  
 ttgcactgcc gttcctcatg gagccgaagc cccggtagat cccaattatg gcgccttgct 120  
 catcggagtt ccgacgtgca atgtcgattg tcgaggttgt ttctgcagag acaggaaaagg 180  
 aggtgcctcc tggaacgcct ggagagttgt tgattaaagg acctcaagtt gtctcggggt 240  
 attggaataa accagaagaa acatcaaaag cgataaagaa tggttggctg catactggag 300  
 atgtcgcaat tatagattcc agaggttatt tgtatattgt ggaccgaatc aaagatatga 360  
 tcattgcttc tggatataaa gtgtatcctc gggaagtcga agatgttctt tatgaacaca 420  
 aggccgtaaa ggaagctgcc gttatatgtg tgcccgacctc atatcgagga gagactgtca 480  
 aggcttttgt tgctctcaac gatggaacca gagtttcggc acaagaactc atagaatttt 540  
 gc 542

<210> 1489  
 <211> 418  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-028-Q1-E1-G12  
 <400> 1489

aatgtcgtca gaggaggaac aagtggaaac ctctactttt gaactttcga gagaagccga 60

ggaagcagcg ataaaagcaa gaaacttaag ggaaaggatt gaaaagtttt tctcgaagag 120  
 ttaccagagc gagaggagag ataccgaaga agtgtcttca gacaacgatg gagtgactac 180  
 cttcgatgag tcttattgtt taagagacca acataacttg ttagaagcta tagaacagtt 240  
 agaaggtgct gcaagagctt tggaagaagt ttctttggag tcttcaaact atacgcagca 300  
 acatcttgaa gaacccaaat atgttgccaa gcccgctgtg catttagagg aatctgtaaa 360  
 gagccagtct acaacataag aaagtgtgac gagtttggag atatctgact atgattgg 418

<210> 1490  
 <211> 345  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-028-Q1-E1-G9  
 <400> 1490

ggtgtggcta gtttgaatag gacagccaat agcagatggg ttgacgttaa tgataaaaga 60  
 gggagtaaag ccaacaagag cagagggaat gatgtataaa gcagggccag tagtaacatg 120  
 gatgttatcg gggctacgat ggagtgtagt accaatagga gacggaaagg tggtagtgga 180  
 tatagaagtg ggaataatag catggatgag tataggatca ttgggagtat atggagttagt 240  
 agtacgacga tggggaagca gttcgcagta cagcatagtg ggaggtttag gaacgtgagc 300  
 gcacatggta tcgtgctaata taggaatggg actactgatg ctatg 345

<210> 1491  
 <211> 460  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-028-Q1-E1-H10  
 <400> 1491

cgcgtccgca ancatcaagt ggatcatccc acgttggttaa agatagactt gtctcaaggc 60  
 agctttaaag tactccaaga ctgtgacaga gatttagaat gtgatacataa taccaagttt 120  
 cagttggaac ttattcagta tggctctctt tcacctgggtt tttggacgag agaaaatgtt 180  
 ctgctcttct atttgagct cgtgtcaggt gtattcataa gggacactct ctaccttttc 240  
 tacaacaaag gtgaagaaca tttgtttgcg agtttaaatgc tgttggttga gacacaagtt 300

tcactgtatg cagacataaa aacaaactgg gagaaacgac actttatcgt ttgcctcatc 360  
 gtcaggctctt tgtgtgagga atatcaacga cagtattcag agctatgttc accgaatgaa 420  
 agcacganag atatgctact agtaaacaga atgtatcaaa 460

<210> 1492  
 <211> 496  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-028-Q1-E1-H11  
 <400> 1492

ccacgcgtcg cacgcgaatc atatttcaga aactttccaa gcaaaaagct gcgaaaccac 60  
 gtcgcatact ttcgccaacg taggcaagag atgaaagtct tcagcaagca ctaggtcaga 120  
 tatccacggt tcgaatttac cagtatcgga taacaatagt ttggtttcta atagctgcac 180  
 acgctcttgg agtttctgaa ccttgtgcat tatttcttca agtggttcgga ctttggaaacg 240  
 agttggcact actgctttct ctccattgga taccagttga agaagcatat tcagatgttc 300  
 attgagtttt ttcgcacttc tttttgttgc aagattatgt ttgctcgtc tcgtatctgt 360  
 gaaggaagct tggtgggaca acatcaacgg aaatggaaga aagaatccgt tggttaattca 420  
 actgattttt ggatggacga cagcacattt gaaagcagtt gctctgtaat atttgtcttt 480  
 gagctagaag aaaaca 496

<210> 1493  
 <211> 513  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-028-Q1-E1-H4  
 <400> 1493

ggcacgacag accgtcagct aagaagatat actcttatgt aagagaatca aaatccagag 60  
 aatatttggga gctaaacgat tcgttgcagc agccagtggga ttcattctgt cncgacaagt 120  
 ggctgtttat tgcaacccca ctgttgggaag ttgcttgtag tgatgggcag cgaattgaca 180  
 tgattccttt gaacaaagat ataaaggaat tgtttttctc tactttaag aagaactttg 240

agtcgaacga agcgtcatgg gactgcactg tagttgacac cgcagttgct gtttttatcc 300  
 agtattatga acagtgcgtg gaacagtact atctagcaag caaagattat gagctacctg 360  
 gttattccaa agtaaaacag attcggcgta tgattgaaga tgttctacaa atagagaagg 420  
 aacttgcgaa tatgcgtcag acccttggtg gcgttcggag tcgtctttgt acctttgaag 480  
 ctgcatcacg cagcgaaact cgtgtgcaat ggt 513

<210> 1494  
 <211> 107  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-028-Q1-E1-H5

<400> 1494

gatcagagag taacacatgc aagtaggtaa agcgaacggg tgagtaaaga ggtgtgaaag 60  
 agtgaagaa catgaaagca cagaagaatg taagaaatgg ttagagt 107

<210> 1495  
 <211> 282  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-028-Q1-E1-H7

<400> 1495

tttgcgaatc tcattcctgg tcacgggtgga gtaacggatc gaatggattg ccaattggtg 60  
 atggggttat ttacttatgt ctatttgatc aattttgtgc ttcgaaatac tcctgatggt 120  
 ggtaatttga tgagttagt gttggagttg agtactgcgg gacagctgga acttttacag 180  
 gaactttatc aactcttacg tgagaaatcc atacaagcgg atgtattgca gcaggatgatg 240  
 aatgaatcga gtacttagat agtctcaacg gcgtgatgtg ta 282

<210> 1496  
 <211> 223  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-028-Q1-E1-H8

<400> 1496



gtccgnccac gcgtccgaaa caagttcatt tgtccttgtc atggttctca gtatgataga 60  
 actggcaaag tagtgcgcgg tctgctcnc ctttcattgg ctttagctca cgtagatgaa 120  
 gacgaagatg gaaatattct tttcaaaccg tggaaagaaa cagatttttag aaccactagc 180  
 gatccttggg ggaaataata acacttgggg ttcttcgtga cac 223

<210> 1497  
 <211> 552  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-028-Q1-E1-H9

<400> 1497

ggaagcaatg tggccgatgg tgctttccca tacgagaaga ctgcttccaa gaggctttta 60  
 tcatactgga atattaaaac agacaaaatt tatcaaccaa gaacagtcct caaccacctc 120  
 tagtatacct agtgccgagg acactcctct ccatatcgac gaaagctgtg tccagcgctt 180  
 gagatatgtt agtagccaaa ggggaggaaa acctgttgct ttaagagtag cagtggatag 240  
 tggaggatgt tcaggctttc aatatacttt tgagttgacc gaggaaaagc cagcagagaa 300  
 cgaaaccgtg gtggaaagaa acggttgcaa agtatatgtg gacgatattt ctctcccgtc 360  
 tttaaaggga agtacggttg cttttgtgga agaattgatg agtagttctt tccgagtgtc 420  
 gaacaaccct ggttcggaag gaggatgtag ttgtggaacg tcgttttctc cgaaaatgtc 480  
 atgatgttac catttgggtg tgtgtgtgta tgtatgcgat agaatatata tgaggcaaga 540  
 acgaagaaac tg 552

<210> 1498  
 <211> 532  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-A1

<400> 1498

cggaattccg gaatcaccac gcgtcggcgg acgcgtggga tgatacacgc atcatcgttg 60  
 cacaagtgga tgcagataaa gacaaagtat tatctcaaca gtttgaaatc caagggttatc 120  
 ctactatcaa gttgttatta cctcgttcca aaagtggaaa gaagaatgtc tccgatgcgg 180

tagtggaata cactggggaa cgtactgctg ctgggtctcgt cgcgttttctt caaaaccata 240  
ccaacatttc catcgcatcg gcaccggtag aaagttttgt ggtggagttg accgatgaga 300  
atttcgatcg agtcgtattg gatccgtata gtcattgtgtt ggtagaattt tatgctcctt 360  
ggtgtagtca ttgtaagatg ttgagaccgc agtacgaaaa agttgcaaag acttatcgcc 420  
atgtgaaagg actggtgaat gcagctatcg atgccgataa atgtggaaaag attgcagaaa 480  
agtatcgaat cactggggtt cctacattga aataattttc agctgggaaa ga 532

<210> 1499  
<211> 426  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-A11

<400> 1499  
aggaggattc tgcagtaaac ataaagaaat ggctagcaag tttcgaatcc tccccttttg 60  
tgatcacgtc ttatgaaata gtaagtttag tacattcaca ttcctattct tgttgaactg 120  
ttggaaagat tcgtagtgat gtagaatatt ttcaacgata tcattggagt tatttggttt 180  
tggaacgaagg acacgttatt cgaaatcatt attccaaaac cgcaatagcc gtaagaagcc 240  
tcacagcaga gcatagactt atattatctg gtactccagt acaaaattca gtcaaggatt 300  
tgtgggtctc ttttgacttt ttgattcctg gttttttggg cgatgaagct tcctttcaag 360  
aacgcttcgt acgacctata ctcaagggaa agagtttatc ggcggaacaa aaggacagag 420  
aacaag 426

<210> 1500  
<211> 411  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-A2

<400> 1500  
ggatgagtac cgcaacatcg ttgcacaagt ggatgcagat actgacaagg tattatctca 60  
acagtttgaa atccaatggt atcctactat caagttgtta ttacctcgtt ccaaaagtgg 120  
aaagaagaat gtctccgatg cggtagtggg atacactggg gaacgtactg ctgctgggtc 180

cgtcgcgttg cttcagaacc atactaacat ttccatcgca ttggcaccgg tagaaagttt 240  
 tgtggtggac ttgaccgatg agaatttcga tcgagtcgta ttggattcgt atactcatgt 300  
 gttggtagaa ttttatgctc cttggtgtaa tcaactgtcag atgttgagac cgcagtagca 360  
 caaagttgca aagacgtatc gccatgtgac aggagtgggg attgcagcta t 411

<210> 1501  
 <211> 432  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-029-Q1-E1-A3  
 <400> 1501

gccatgtaca tagtagccaa acgtctaaag tccaagtatg acattcaaga tgaaagacgt 60  
 agcttgatg aggcaatcaa tctttggtgt agacaaggag tgggtgacaa gtctttttgt 120  
 ggtggtgagc aacctggttt agcagatttg gttatgtttg gagtcttgcg ttcttttaaaa 180  
 tattatgacg tgttcgaaga tattcagacc aatacggata tgcatttatg gtatcataga 240  
 atgcacgctt tgggttggtga ttctcaatg atnacaatag aagaatgaac agcaagtcgt 300  
 tccttgggaa aatatggacc tatattgcta tcaaagtaag agaagactgt tcagatgcct 360  
 cgtctaattc ccataaaatc aatatgcaat ctgtgagaat aacgaaatcc gtgtctaata 420  
 cattccgttg ct 432

<210> 1502  
 <211> 505  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-029-Q1-E1-A4  
 <400> 1502

ccgggacgac aacgcgtcgg actttgccaa aattttttta tacaaagttt gcttctcggc 60  
 aaccaacctc cttccgacaa agaatttgaa gatgttttcc tcgctatcca gttacagtat 120  
 aagtgttctc atcctggcct gaacataaga agcgatagcc agtgaaaaag gcagaagcaa 180  
 agatacgaac taagactgaa ctactcgaat aagatttgca ctgaaagttg gtcaagtttc 240

ttcgcaccaa tgtttcgtcg ttctactagc aaagtttgcc gaggtcaaag taagttgaaa 300  
 agcacaacca caagagtagc gggaactagt cgaaacggaa gacagcttgt ctttatggct 360  
 tcttcttcaa tttttccttt tcttcttgag acagaagtct tccaaaattc cctctttcct 420  
 ttctctcact atatctatcc actaaaaagg aagaatgggc tcttaacatc aacgagaact 480  
 tcaccaaadc cttcactaca tcgac 505

<210> 1503  
 <211> 120  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-029-Q1-E1-A5  
 <400> 1503

gcggaagct gcgaggagga cagccacatc tggacactga gcataggctc aaacaagata 60  
 agtcagcagt ggggaagatt gggcaatgta catggaagta tcaccagta atgacgagt 120

<210> 1504  
 <211> 292  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-029-Q1-E1-A6  
 <400> 1504

cggattaccg gatcaccacg cgctggccca cgctccgaa aggatttga gaattattcga 60  
 ggcagcagaa tcgaagctgg attcttccag taagacatgg agaagttcgc aaaagagtat 120  
 gatgaagaca tgtaacatca ggtaagtata tacaggtat tataggtttt ggatttggaa 180  
 gaaacaaggt acttcaagta gtcttctttg ttgtgtatag gatagagcat aacttctaaa 240  
 cttatttatt tgacttcaat tgaattataa taaaacattt ttgactaat cc 292

<210> 1505  
 <211> 592  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-029-Q1-E1-A7  
 <400> 1505

accacgcgtg cgactaaata aggctctcga tagagatgag gaagttatTT tagcttatga 60  
 gatgaatgga gagaagctgc ccagggatca tggatatcct ttacgagttg ttgttcttgg 120  
 ctatgttggg gctcgaagtg tgaaatggct aactcgaatt atctgtaaga tggagtcttc 180  
 cgatggatat tttatgacga aagattacaa atatctgcca tctaataatgg acttcaataa 240  
 tgtggattgg agctctactc ctctatcat gaacttgtct gttcagtgtg caatatgtga 300  
 tccacttcca gatacaaagt tgtctccagg cccttataaa atccgaggat atgcactaac 360  
 aggaaaagga gaacatatta tgagagtaga cgtatctatt aataactcca aaaactggca 420  
 actggccact ttgattcaag gagacgaagt tgcaagcaaa gaacttccga aaagggtcac 480  
 ttctggaatg aacggatggg cgtggcggtt acgggaattg gtcgtctata tgaagcgacc 540  
 actggttcta cagctagaac gatagattct gcctgtaata ctcaacctga gc 592

<210> 1506  
 <211> 283  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-029-Q1-E1-A9  
 <400> 1506

aattgaaagg agggctcgacg agctcagctt gaagaacaaa gaacttgcgt ggggttggac 60  
 gttatttatg aacttggact ctattgacac aggaattaat gtcctttttg acccgtttgc 120  
 agacgcctca cgtggagagg acgcagcagt aaccanaaat atagtgcata ttcgcttgca 180  
 acaaaaaaac ggccgcaagt gcttgacgac cattaaaggg cttgacacaa aattggattt 240  
 gaataaaatt acaaaggcct tcaaaaagga ttttggttcc aac 283

<210> 1507  
 <211> 153  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-029-Q1-E1-B1  
 <400> 1507

aaaatgtata aattcgtca aataaaaaat ctaatgaaca taataaaaaa atctgtgata 60  
 caacagaaag ataaagagaa agaagttaca aagataaaac aatgtaggct caaaaatcaa 120

gtaagaaaaa acaaaaaagc gcccaagtca cta

153

<210> 1508

<211> 492

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-B2

<400> 1508

cagtacgcgc ggcattccgg gatcaccacg cgtccgcgga cgcgtggggg aagatgggag 60

actcagacta ttcattttct cttacgacct ttagtcttag tggcaagttg gttcaaatag 120

aatatgcgtt gaacgctgtt gctgccggtg ctacttctct tgggattcga gcgaaaaatg 180

gggtcgtgat cgcgacggag aaacgtatgc cgtccattct tatggaaagt catactttag 240

aaaagatata ttttatttcg gaaactacag gaatggtgta ttcgggtatg ggtcctgatt 300

caagagtatt attgagaaaag gctcgaaaag ttgctcaaag ttactatcaa acctataaag 360

agcccatacc agtcgttcaa cttgtacgag aaacagcttt cgttatgcaa gaattcaccc 420

aatctggtgg cgtaaggcct tttggtgta gtttgttgat agctgggtgc gatgaacaag 480

gacgacacct gt 492

<210> 1509

<211> 375

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-B5

<400> 1509

cggatatccg gtatcgacca cgcgtcgggc actattagaa actcgaataa tggatgcatt 60

gactcaagtt tctaagactt ccgactactc gagacttgca agtctccgtg tctatcgcca 120

aaaacttttg gatttgaagg ctattgctga ccagatggat gccttgctgg aagaattttt 180

tgattccgat tttgtcgaag aagctttgtt tagagaggac aatgggagca aggatattgg 240

tccttggtgt agtttggtatg acctgaaata tattttcgaa ccttatcttc agagtttgga 300

tttacctaga ctatctgtgg tagttttttg acaggcacta caaatgtgga acgtggcttc 360

atgctcggat ttgac 375

<210> 1510  
<211> 443  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-B7

<400> 1510

ccacgcgtgc gcacagaata caacactcgt atgctcctac aactgtgcaa tcctcctcct 60  
ccactactac tacgacaacc agtggttagag cctgtgctac aacaaggaat ccacgtatga 120  
atattcaacg aagaatattg gaagctggaa gaaggtcact tcataatgag tcgggtccta 180  
gatattcgac tcgtttgaac tctcggagtc tccacaatac attggcaacc acaagaagaa 240  
atcgtggacg gaaccatcga aatactacaa gtaataatag tgtggatggc aataatagtt 300  
atcctagtgg tggtgacttt tggatcgggtg gtggttcttc ctctcttctt cgtcattctt 360  
tgaatgcgtg gattgattat gttgctcaag tcaatccttg gttactttta tcttttcatg 420  
atggcgactt tacagcggat gac 443

<210> 1511  
<211> 285  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-B8

<400> 1511

cagcgggaca gagaaaataa attttttaag acagaagggc ttgacggatg aagagataaa 60  
ggaagcgttt cacagagctg gacagatata tccagaagat agtttttctg gaaatgtgga 120  
acgagagaag tggaattctc ctccataggc aacagcaaca ccggataatt taccacagac 180  
tgccgtacga gacgagagtg tctccaatca acaggctgcg cgagcttcta cgggcaaagt 240  
atcatcaaac agtggttcctt cgaatccaac gacagtgaca caacc 285

<210> 1512  
<211> 476  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-C4

<400> 1512

cgtcggtgtg ttcgtgtgat tggttggtaa aaaggcgcct attttcaaag agtccaacct 60

attgagaaaa catgaatccg gaatatgact accttttcaa gttgttgctg ataggcgact 120

ctggagtggg aaagtcttgc ctcttggtgc gttttgccga cgacacttac aacgagagtt 180

atatatcgac gattggagta gacttttaaaa ttcgcacgat agaactggat ggaaagaccg 240

tcaagcttca aatatgggat accgctggac aagaacgttt ccgcactatc acttcttcat 300

actatcgagg tgcacacggc atcattattg tgtatgacgt taccgaccag gaatcgttca 360

acaatgtcaa gacctggttg cacgaaattg atagatatgc gaatgagagt gtgaacacac 420

ttgtggttgg caacacgaat gacttgacga cgaaaaaagg gtgtagacac tgcaac 476

<210> 1513

<211> 338

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-029-Q1-E1-C6

<400> 1513

cacaacaatc acgacgctgt ggaagtctga acgaacgaga gaagtggaag atgagatggc 60

tgagggtgtg ctattcaccg acgcanatgt tgagttgccg gancataaaa aagacgctga 120

atgctgctat tcatttctga actanggata naaataatgc aagtattcta naatttacan 180

cattcttgca cgacaatact gctaaggat tttactgaac tcgccagaca tttcttgggg 240

ctgaacatca aatactaatt gaggtatgta ataagttttg ctgcaaacgg tgtagtccca 300

acagacacat ttgggttatt tatttcggtg tttacatt 338

<210> 1514

<211> 374

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-C8

<400> 1514

ggataccgga atcgaccacg cgtccgacct tacctctcca agaagagtgt tgcacggctg 60



tcgaaagaac gtgctgtgaa gtgagagaac gtacgagaaa gccaaagtgag gaaaagaagg 120  
 caagtagagg gcggcccgag aaaggagagg gcgtaagacg tgatacagag taggaagaaa 180  
 agagaagaga gctagaaagg aggtaaaaga agagtaaaag gactagaaga ggtacggaat 240  
 tcacgaggaa ggagcgtgaa ggaaggagga atcccaagta atcgaggaag aaaaagcttc 300  
 ggtgaaagcg tgaacggatt ttgtacacac tgcccgtcaa gttctggaag tgtgctagga 360  
 ataagcagga gaag 374

<210> 1515  
 <211> 436  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-C9

<400> 1515  
 gatacatcac ctaaagaaaa caaaagagag aatatataaa tgggtcagat gagaacgaaa 60  
 acagtaaaaa agtcggcccg agtgatcatc gaaaaatact attccaagct gactctggac 120  
 tttcaaacga acaaaagaat atgcgatgaa gtagcactca ttccttccaa acgactgcgc 180  
 aataagattg cagggtttgt aacgcacttg atgaaacgta tccaaaaagg acctgttcgt 240  
 ggaatatctc ttaaactaca agaagaagag cgtgaaagaa gaatggactt tgttccagaa 300  
 gtttcagcta tagatgtggg tgaagtcaag atcgatccag tgaccaaaaa tatgttggaa 360  
 tcgttggggt ataaaaatct tctaattgtg gtggtggaaa ctggagtaga acccaagaaa 420  
 tttgcaccaa ggcct 436

<210> 1516  
 <211> 453  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-D10

<400> 1516  
 gtccaccac ccgctccgac acgcgaccgc ccacgcgtcc gtgcacaaat ccacggttcg 60  
 tctcgagggc ttatcttggg ccagcaacgt ggacatcttc cctgttgtcg gatatgccta 120  
 actcaggacg gttcaacaaa gtggtgtcga ataaaatata ttttccgact tgtatatgca 180

agggtttgcaa aaagtgtgaa gacagtcaca gatagtcgtc gcttttctcc aataaccccc 240  
 acaaatacaa caagtaaata ggcagttcac aacagcaaga ggaataacgc agtaattctc 300  
 ctgttccagc acagttgaat tactgctcat tcttaaatac ttgtacttgt attttgagac 360  
 ggtgttttaa gcgaagctcg ttacttgcgt tccccctcgt cctttgcaac gtaaaatgtc 420  
 ccaggaatat gaaaatttcc gttcatgttg ctc 453

<210> 1517  
 <211> 489  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-029-Q1-E1-D4  
 <400> 1517

gcgtccgccc ttgacggttg cagagaatac atanatagca nagaagcagt agatatgaag 60  
 aaactttcag aagccgcaac cagtattgcc gaaggagata ttctcaatga tttgggtcgt 120  
 cgtcaacaag cttggaattt gatgcctgtt caagcaatat tttctggaat ctatcctgca 180  
 caaatacttc aaggaccctt tgctgacatg atacattttc cttcgtgggtt aggcaagaat 240  
 tccactcgtt ccaaaaacaa acgtctagct ttggagcttc aaatgcgaat gagtactaac 300  
 atatcgggct ctttcaatgc ctttttgatg gaatatcttc catgtctaca aaccatatta 360  
 tcggctcctc ttgtgaatag caaagaaggt gtttcggaag tgatagataa gcttgatgca 420  
 tattacctgt ccaaagatga ctgggacact ttgatgtcgt tgagtctaga gaaaaatgaa 480  
 atggacaaa 489

<210> 1518  
 <211> 459  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-029-Q1-E1-D5  
 <400> 1518

ccacgcgtcg gacataaatg ccaagttcac acagctcgga ccaaattctg tgcagctttt 60  
 accaacattt tgctaacttc ggttgatcct ttaggaacaa taccaagctt ctcaagggcg 120  
 gaaactgtta tatgtgtgaa ataatgtcca actcgagtat gacgaaaacc tttgatggag 180

aaacctgctt tcaacggata ataccaaggg agctctgagt attttgaggc atcatagtag 240  
 tcgagaactt caaaacctgc ttcttttaaa ctttggataa cttgatcgaa agttgccgtg 300  
 tctggcagcc catttccaac ctcgactgca aattttgcct cacgatgttc cttattttga 360  
 gggtcatact tatcggttac gcaccattca taccocgcga agcagcatcc atgtttaatt 420  
 actctataag cctctgaata aacttttgtc ttttccata 459

<210> 1519  
 <211> 589  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-029-Q1-E1-D7

<400> 1519

ggataccgga tcgaccacgc gtcgggagga ttcgaggaga gagacagaca gatggccaac 60  
 gctgggtcaag atggccttgt gcaagtcaac aaacatagaa aagtaaagag attgcaagaa 120  
 gataatattt tgaatagagc actatcacia ccaggagatg tatttctgtg cttttgcaac 180  
 atccagttgt tggatgaatgc agaaagagct attataggaa atattacttg tccagaaagt 240  
 atcgaattgt gtcgtctatt agctggacat atagcggttt ggttcgatga acatttggat 300  
 gactttcggt tggaagctat cttgggagca ctattgtgta cttgttattg tgagtggaa 360  
 cgttttgaag gagaattggg ggtacaagaa tggaatgaat tggagaagat atcttcctta 420  
 gatacttggga agcttgtgct tggatcaaga caaagagtgg ataatatgtt acagcgagta 480  
 cacaagctga cgagcatctt gtccttttta tactcgggcg aacaaccgag agtggactat 540  
 atcgttgctg aggatgaagc angttgggac aagttgtgga gaggaaaac 589

<210> 1520  
 <211> 622  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-D8

<400> 1520

cggaattacc ggatcaccac gcgtcgggct ctgtgtgggt ttcttcattg aattctgaag 60

gctgccgtaa cttacagcag tctttgttta tcatggagag cgagacagtg aaaaatgata 120  
agctagctaa actacaaaga atggctgtga atgttcgaac tgggtgggaaa ggtaccgttc 180  
gaaggaagaa gaaggcagtt cacaagggca caccgacgga tgataaacga ctgcaaagca 240  
ctttgaagcg gcttgggttta aaccaaatac ctggaatcga ggaggtcaat attttcaaag 300  
acaacgggca ggtgatcaac ttactaccc ccaaagttca agcagccatc ggagcaaaca 360  
cttatgtggt atcaggccaa ggggaaacaa agtcccttca ggagctgctt ccaaagtac 420  
tcaatcagtt gggttcggac aatctagctc aaatgcgctc tcttatggaa agtctcagta 480  
caacagacga aaagggcgaa ggcacagaga atggagacaa ttccaaagaa gacgatgata 540  
ttccagagct tgtggagaac aaaacctttg accagttgga agaggagaag aatgtgaaag 600  
aaacagatgt ttctgcgagc tg 622

<210> 1521  
<211> 386  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-029-Q1-E1-D9  
<400> 1521

tccacccgcg cgtccggaaa gtttatgcaa aaaaattact ttacattcg acaacaagtg 60  
gatgaaatga cggaaaaagc gaaacaagct cctcttcgc cggtggaaga actttatcgt 120  
gacatttatg tggaaggaat tgaacatgtt cgtggtactt tgggaacaa tggacttggt 180  
aattacttgg cataaataat tcccgatagt ttctctatct gatatatata tctccatgtt 240  
gttgttgaat gtaaaagtaa ttttagtgca agtttctgca aaaaaaaaaa aaaaaaaaaa 300  
aaaaaaaaaa aaaaaaaca aaacacaatt tttttaaca aaaaacacaa aacacaaaaa 360  
aaaaaaaaag gggggccccc cttaaag 386

<210> 1522  
<211> 385  
<212> DNA  
<213> Cyanidium caldarium  
<223> unsure at all n locations  
<223> Clone ID: LIB190-029-Q1-E1-E11  
<400> 1522

cacacgcgtc cgatacttgc ttggtcaaac atactcgaac aactttttatc gaacaggggtg 60  
 gagatggcat cccttgggtc ttctgagatt gttgcatatg taaagactgg tgagcccatg 120  
 gataagtcag gtgcttacgg tattcaaggc atangcgggtt ctcttgtaaa ggtacgatgt 180  
 tgagggttgtt tatattcatt atttattttg atgaacaacc agagtgttca tggctgttat 240  
 ttcaatgtca tgggattgcc tatgcatcat ttagccaaac aactagcgca actgtgtcaa 300  
 cgagaagagt tttgatagta gtgacttgag ccaactttta gtttcattga ctagttttga 360  
 tgtatcttgg catttttagcg ttaat 385

<210> 1523  
 <211> 549  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-029-Q1-E1-E2  
 <400> 1523

cggacctccg ggatcaccac ggcgcgccc gcgtttccag ttggtttcac aagtatcgga 60  
 tgaagagttg ccaaaagtat atgcagcttc caactctttt gttttagcca caagaggcga 120  
 aggggtgggca cggcctatta tggaagctat attttatgaa cttccagtca ttgccaccaa 180  
 ctggagtggg cataccgaat attttgggga agatacgggc ttcccagtta gagtagaacg 240  
 tcttgaaaag tattctggaa acgaccaga aatgaaacct tatgtaggat tacatttggc 300  
 agttccttct atttctgact ttaggttgaa aatgagacaa gttatgttag atgtagatac 360  
 tgttcgttct cgagtactca aagcaaacg agttataatg aataggtaca atcctgaagt 420  
 tgttggggat gaaatattga atcagtttat tcgaattaag aagatgctac tcgcagggtc 480  
 tgtgcaaaag gatcactgag cctgagactt gctanggacg accacctctc gttgccttca 540  
 tttatatat 549

<210> 1524  
 <211> 569  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-029-Q1-E1-E4

<400> 1524

ccgggacgac cacgcgtcgn gccacgcgtc ngctcgagtc gttcctttgt tagttgtgag 60  
agattggact atgacagtgg catggatccc ttcaatttgt tgcataatgag tctgtaacgt 120  
tggaatatat aaatgatagt tgaccaaagt tgaagttccg agcttcaaaa ggattgaaaa 180  
ctttaaaccc tgtaagttac actttggcaa actaaaactt tatgctactt agcanacgaa 240  
atcctattct aagtatccac acttatgtcc accacgggtc agactctttg cggaaatctt 300  
ttccgttaaa gtcttgaaaa caatgtttcc tcccatccac agagccaagg gaagcagaga 360  
gctggacctc ggactacgtg gctctactgt cataatgaga gccataacaa taacagataa 420  
acggactctc tctgtcttcc caaggaacga ctgtacgaaa gcagctgtcc attctgaaat 480  
ataaccaagt aatatgggtt cttcttgca ccttgagcca atttccgatt tgtaggaatc 540  
cttgccttaa tataaaatca tccttcttg 569

<210> 1525

<211> 578

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-E7

<400> 1525

ggaataccgg aatcaccacg cgtccggacg acgaccaaga tcctagagcc tccttgctta 60  
tgcagccggt atctgacaaa tacttgcaaa agagttcaga cgaaatagtt agtttgaatg 120  
gagttgacgt ccataaagaa attgaggaac gactagatag ggctttcaac tacgaactta 180  
gacttttaag tggtaatgcc aacagagctt tatcggttga aatatctcgc ttacttaata 240  
ttccactgtt ggacgctgaa gtcaagcgtt tttcggatgg agaaatattc gtttctatca 300  
aagaaaatgt tcgtggaaaa gatgtattca tcatccagcc aacttctcct cctgtgaatg 360  
acagtctcat ggagctttta attatgatcg acaccctgaa gagagcgtct gccaaacgta 420  
tcaccgcggt cattccttat ttccgatatg cgagacagga taggaaggca gctccaaggg 480  
ttcctattac ggcgagactg gttgctgact tgatatccac ggctggtgcc tctcgagtgt 540  
tggcgttga acttcatgct ggacagatac aaggattt 578

<210> 1526  
<211> 131  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-E8

<400> 1526

ggattaccgg atcgaccacg cgtgcgacat gttatcatcc tcataatggt tcgaagttct 60  
atgtgagtct ttctacgaga cctcctgttt ctccatctat cttctgctgc ggggagtgag 120  
aacggtcaac c 131

<210> 1527  
<211> 387  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-F1

<400> 1527

ggaattccgg gacgaccacg cgtcggccca cgcgtctgga aattagcgtt tggtttgtaa 60  
gtcacgagtg tatttggcac ggtgttcac tcgtccagga gaaaattcat ctgtcgcgtg 120  
gctaattgaa ttcatttaga agtagataga atatcgcaac atgttgattt atgagaatga 180  
attctaccgc aatcagtctt agtctcctct catccaaaac tttcgtttag aagtcacata 240  
gttgtaccgg aacgaaagtg aaatcatgct tgtcctagtt cgcttgtttg gaataactca 300  
agaaacaatt gcaccagata aaactctcta atagaaatac ctttatattg caacagaatt 360  
ccaatgaaca atacacctag tgaagcg 387

<210> 1528  
<211> 414  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-F11

<400> 1528

caaacgcgac cgcccacgcg tccgcttcaa gtgcggtccg cagccttcct aatgtcaact 60  
gcatcaacga aacaagaaaa cgaagagcca caagaagaac agaaaaacga gcaagaagat 120  
gagaaaacaa ctttgaaga agactattct gttccgttca aacctctagt aaccttggac 180

gaagtgcaag tgacgacggg agaagaagac gaagaggtgt tgtacaagaa tcgagccaaa 240  
 ctgtttcgat ttgataaaca aggttcacag tggaaggaga ggggtactgg agacataaag 300  
 atattgcaac acaaggaaac caagaaaatt cgtttgctta tgcggagaga aaaaactttg 360  
 aaaatttgcc tgaatcatta ggtcaatcct agtattcagc tggaagaaaa tgtc 414

<210> 1529  
 <211> 429  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-F12

<400> 1529

gatttctgga cctgggttgtt tgcattgcctt ggctggattg gctagtgcaa cagtaaattg 60  
 ctttccaatg attttactaa gtggagctgc agaaaactcg caaatagatc gtggtgcatt 120  
 ccaagagtgt gatcaacttc gtgcagcagt tccacatgca aaacaagtat ttcgagttga 180  
 cgatatcaca gattctgcga gatttctttg tcgagcattt catgtggctc gaagtggccg 240  
 tccaggaggt gtatacatcg aatttccttc caatgtactt catcaaaaac tggaacgaga 300  
 gaaagtggag gaattgttgt ccttttagcaa agagtttata tcttctctc ggaatatgcc 360  
 agttccgact gcaacagtcg ttcaacaaac tgttcagttt ctaagaaatg ccgaaagacc 420  
 tcttgttgt 429

<210> 1530  
 <211> 454  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-F3

<400> 1530

cggcttccgg gacgaccatg cgtcggctca gatcaagata ctcctaagca gagcttctgt 60  
 tgctgaaact tttcttggtg tagatgtggg gtctctctgc gtcggtttag ccattgcaca 120  
 acatggaagt agggtagctt ttccgttgtc ttggtttaaa cggacggggc cggttggtga 180  
 cgcaagaact gttcgtcaga tttttattga caacggtggt caagtttgtg tttttgggta 240  
 tccccacaca ctttctgggtg gtgaaggcga aaattgccgt aacgttgcac tgtttgtgaa 300



aggtttgcag gaaaacggtg cgtttttttaa cacgcaagtt catagctgtt tattctggga 360  
 cgaaagattc tctacgcaag tggcaaagcg agttgtttta cggagtaaga cgaattggag 420  
 agagttacga gatcaccaaa ggacagaatg aaaa 454

<210> 1531  
 <211> 234  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-029-Q1-E1-F4  
 <400> 1531

agctttaga ggaatatgct gccaaacaaag acttgttctt tgaaaactat gcacaggcac 60  
 ataagaaact tagcgagttg ggagcagttt gggtaaata agcgtcgttg tggttgttgt 120  
 ttttgtggtg gtgctgaaaa taaaaaaagt cgttgttggtg cttgtctaaa aaaaaaaaaa 180  
 aaaattaacg tatgcaaaca aagtacataa gagaagataa gcaggatcat tttc 234

<210> 1532  
 <211> 376  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-029-Q1-E1-F5  
 <400> 1532

aattctccaa ctgttatcgt agaaaaaaga ctctaggttg ggttgaacct tttctgtgga 60  
 gatggaacaa acaacttgct ataaataagc agagaagagc tttggggtcg aataacgtga 120  
 gcattctatt tagtcttgcg gtgttggaag atagtcctgg gtcgtcttct gtttctacca 180  
 gcaacgacgt tcataacggc aaagaaaaca cactgagtct agaacagctt caactgaata 240  
 aggaatatga agctgtagta acaaaagtaa cagactatgg cgcctttgta gacatacgtg 300  
 cagtaaagta cggcctactg catgtttctc atatgagcga ctcatttctc agagatccct 360  
 cttaaatcgg ccacgt 376

<210> 1533  
 <211> 585  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
<223> Clone ID: LIB190-029-Q1-E1-F6

<400> 1533

aggctcggaa taccgggatac accacgcgtc cggttgttgt tgggtcgtca cgttttggtg 60  
acaaggaaag ataaatgggtc gtcaaaacag aaacctgtag tttttcaggt ttccgcattct 120  
accccggaag aggcactcga tttgtgcgcg gggatggcaa actcctcatc tttagtaacc 180  
gcaagtgcaa atcctacttt catatgcgta ggagaccggc agagttgaat tggactcagt 240  
tgtatcgaag aatgcacaaa aaaggacagc aagaggagac acagaagcga cgtcgtacgc 300  
gcaaagttgc tgctgtaccg aaaccgggtg aaggcgcgtc gttggaagtg atcaaagcaa 360  
agagaacgca acgcccggaa gtccgaaaaa ctgccaaaga agcagcgttg aaggaaatca 420  
aacaacgcca agctgctgcg gctggaaaaa gaaaagggtg aagaagagat gcgacggcag 480  
caacgtccaa aagaacttct gcaccacctt cgaccagtga gaaaaaacct gctcaagtgc 540  
tttagagttc acganagaga taaagaagag agtatggcac tcgtc 585

<210> 1534

<211> 601

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-F7

<400> 1534

aggctcggaa tatccggatac accacgcgtc cgcgcggaag taaagccacg tttggttcat 60  
ttgagtgaact ttgtatccga ggactccgat gctatagcgc ctacactaaa aaaagctgca 120  
aggaatattc cacattgtag ttttaaggagt gcataatata tcataggagg ttactgtttg 180  
gttctgtctt gcaaagctaa atggagcagt tacagggtgt actcctactc actcctagtt 240  
ttacgtctgt ctatattgaa ttttcaatcg ttgaagttaa ctttgatcca taaaccacta 300  
atggaaatct tagttggtgg ttctgctgtt ttagaatgcc tcctaacaat atgcactgtc 360  
aagatgtata ccataaaatg actacacagt tacataaagg ggtctcttct ggtgccttcg 420  
acttgagtca acttggtgctt cgtagttgat actttgtgat tctttcaata gccagccaag 480  
gtaaaagtat acgtatttaa acaagtggta gtgctgaaag tgtcaaattg gcgggcaata 540

agaaacactg aagaagacct tgttgaatgg agcagtttac acaacaaaaa gttctgtgct 600

c 601

<210> 1535

<211> 64

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-F8

<400> 1535

ggaataccgg gatcaccacg cgtcgcgccc acgcgtccgc ccacgcatcc gaagtattcc 60

tgat 64

<210> 1536

<211> 402

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-029-Q1-E1-G1

<400> 1536

ccgggatcac cacgcgtcgg acgaaaagga agtcaagtga aactcgttcc agaagtgcc 60

ttgagagcca ctcatatgga aaatacttat gatttcttca agcctaattct cagttcggaa 120

tatccaaccg tggatggtgc gaaaaccatc agctgttata ttcgggcgtt ggatacttgt 180

tatggtcgtt tcacacgtcg tgcggaagaa ttgttgaagc aagaaaagt ttcgttgcag 240

gatatcgact acattgtatt tcatgcgcct tttcataaga tggttcaaaa gtcttttgca 300

cgtttgcctt tcaatgactt tcgacgcgat ccagataaca aattattcga gaatgttcaa 360

gcgtntcgga atatttcgat ggaagcttcc tatagtata aa 402

<210> 1537

<211> 456

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-G10

<400> 1537

gtccaccac ccgtccggag ttgcaaata cagaaataa gacaagtccc gttgtcgatg 60

agaacgaggt gagaaaaaga aatatgtttt gcctcctact gaaaacttgc aggatcatat 120  
 tgttttggaa atgaccgaca ttttttctgt ggaaggatgt gtcattggaa acaaacctca 180  
 tgttactcga attggcgatt ttgaagtaga cgtcgtttta gaaggtctaa ttcttgcata 240  
 ttatcaggtg gacaaacctg gacagattgg aaaagaagta ttctcggaga agccaatgtg 300  
 aacatttctt ttatgacgtt gggtcgacat gtaccatcgc aaatggctct tgtattgcta 360  
 ggcttggaga atcaaccgca tgagaaaaca tcggaaaaga ttcgggtaaa cctcgaattg 420  
 gagaagaacc cgtgttatta gacttgggtg aaattt 456

<210> 1538  
 <211> 399  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-G12

<400> 1538

gggtggacat gttgcacgtt ttgttgtctt ggattgacag acagggcgga gtgtgtgtgt 60  
 acgattaatt acgtacaagt gcacgcacat tgattgatat atgtaaaccg actggtggca 120  
 gagaaatgcg catatgcagg gacgatggag tgtgcagact cgtgagtata cactcagttt 180  
 gaacaagcga ttgaatgggt gtatttggtg gagacgtgca cctcgggcaa acatagagtt 240  
 ccggaagttt gatcaaacgc ctatgggaac aggagatggt ctcgtagaag caccactgca 300  
 tagatgtatt tgttcacacg gcacccgaaa cgcactcttt cgtaatcgca tgaggctggc 360  
 aacactggca aatcaatact tacatgcacc tcaatgctt 399

<210> 1539  
 <211> 255  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-G3

<400> 1539

tatacacacc atttttcaca caaccaacat gcaaataaca cacgtaatcc acgctgaaca 60  
 ccattctcgc atcaatacat gacccaactc taagaaaata atatttgtca caatcgaatt 120  
 aattccaata ctgttcagtt caatctctcg tgaaaacgtc tgaacactcc taaaactcag 180

aacatcagct aaatatcata cacatctcat aatcgcaaca ctgcggctca atccgttctg 240  
 agtccccccc tactc 255

<210> 1540  
 <211> 595  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-029-Q1-E1-G6

<400> 1540

cactaggctc ggaataccgg aatcaccacg cgtccgcgcg acgcaagagt gaagatggaa 60  
 cactggagtc cttacaaaga cgaacttgta gctacagcaa aggcgctggt aactcctgga 120  
 aaaggaatcc ttgctgggga tgagtctacg ggcactatag gaaaacgttt tgctccata 180  
 aaggtggaga ataacgaaga aaatcgcagg agctatcggg agcttttatt cactactcct 240  
 aactttggtc agtatatttc ggggggttatt acttttgagg aaacgttgta tcacaagact 300  
 agtcaaggaa agccatttgt ggacgttatg aaggaagctg gagttatccc tggcatcaag 360  
 gtagacaagg gagttactcc gatccctggt acgaaggatg aaacttccac ccaaggtcta 420  
 gactcncttt tgagtcgttg tcaaaagtat tatgagaccg gtgcaagggt tgcaaagtgg 480  
 agagccgtga taaaaatatc cttggcagat ggctgtccta gcgatgtggc aatcaaagag 540  
 aatgcttgng gattggctcg ttatgcagca atatgtcaac aagctgggtt ggttc 595

<210> 1541  
 <211> 591  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-G8

<400> 1541

ccacgcgtcg ggcgagattt gcctcgtcga atgagagctc tttgcgtggt tggtttctta 60  
 tcttcggcag agtctggtta tctgcactat aataaagcgc gtgtgccctt taaaagccag 120  
 ttttcacgaa tttctctaaa tactgtatta agggcagaaa aggcccttca aacgagaaga 180  
 aaattaagta ttagcctttt cttgggactt ggcttgaaac aaaacacgtg ttcagcactc 240

catctggtac aggtgacaaa tgccaccttc agtgacctgg agagcagtag tatggcgggg 300  
aacgaggaac cgcagatag acaaactttt gaaaatttaa ggatttgtca agtatttgaa 360  
ggaacagtgg aaaagttgat gccatacggg gcttttgtga atataggacc gaatctttcc 420  
ggactgctgc acgtttcaca aatctctgaa aacttcttaa cagaccctgc agaagtgctt 480  
agtgttgac aaacagtgca ggttcgagtc attagattgg attctgagaa aagacaattt 540  
gcactgtcta tgaagtcctc gcgtaaacga gaaactagtc gtccaaacag g 591

<210> 1542  
<211> 384  
<212> DNA  
<213> Cyanidium caldarium

<223> unsure at all n locations  
<223> Clone ID: LIB190-029-Q1-E1-H1

<400> 1542

agaactcata tcaaccaa at catatcgctg taatagaagg cttacatcca tggtatgatt 60  
ccaggatgaa acagctctta gactttactg tataacttga tataagtgat gaggtaaaag 120  
tagcatggac aattcacaga gatatggcag aaagaggcca taaacttgaa aatatcttgg 180  
cgtccattga gtctcgaaaa ccggatttcc aacaatatat cgatcctcaa aagaaagatg 240  
caatagcggc cattcaagta ctntccaacc agctcattcc tgatgacaaa gaaaagaacg 300  
tcttacgtgt acgttttata caaagagacg gaaatccccg gatccaactc gtatatctgt 360  
atgatgaagg ttccacaatt gact 384

<210> 1543  
<211> 437  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-H10

<400> 1543

gcgtccggag aaaaaaccca gaagccaaga taaggatatca aagtaaagaa agaaggaaaa 60  
ggagaagaag agagggtacg cttagaagca gcaaaccaga gaggaaagcg ttaaagcatg 120  
aaagaaaaga aatccgaaaa agaagagaaa aaggtaagaa agaggaccga atcagggtaa 180  
gaggtagagg agcaagaaga gaagagagaa tgctgggtgg agtagcgaag caagagaagg 240

gaagtaaaag gtaagaaaga ggaaagggtt acgagagaag gaagtagaaa gaagagagtg 300  
 taaggcggcg tcataataga aatccgaaag gagtagaaga aaagagagag aagaaagaaa 360  
 agaagagaaa agccgtactg aagaccgaca caggtactcg aggagaaagg agaaccagat 420  
 taaggtgaga gaatgga 437

<210> 1544  
 <211> 449  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-H12

<400> 1544

ccgggtcctt cagaaatggt gactacctga aacttcactc tggaccagga ggtgtcaaaa 60  
 gtatggattg gtgtgcgaca ctatttcgaa tgtatattcg ttgggcggaa caacattcat 120  
 atgaagtgga cattgtcgat gagaacaaag gagaggttgc aggtattcgt tcaggaacgt 180  
 tgaagattga tgggtggcgat ggttggttcatt ttggttggtt gagaaaggaa gcaggagttc 240  
 atagacttgt tcgcatactt ccgttcgatt ctggaggtcg tagacatacc tcatttggtg 300  
 cagtttctgt tattcctgat gttggtgaag acttgaagga aaatttgatt gagcctggct 360  
 ctctgaggat cgaaacgttt cgagcttctg gttcaggagg tcagcatgtc aacaaaacgg 420  
 aaagtgctat acgcatagtc cacatccca 449

<210> 1545  
 <211> 498  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-H2

<400> 1545

catgttacta tcctcatgat ggtttgaagt tctatgtgag tctttttacg agacctcctg 60  
 tttctccagt atcttctgct gcggggagtg agaacggtga aatggattct gctgctcttt 120  
 tgaaggaact gtgtctagat ggctattccg cagaagtgga actgggccag aatgcacttt 180  
 tgaacagcca agacagtcct gggtcggttag acggagttgc agatgatatt gcggccaacg 240  
 ttttgaacag cactcacgag tctacgagga ataaggacaa agttccttgt tatgaccgtg 300

atTTtgagtc tGtttgcgaa ccttttattg aatttcgcca tagagatggc agttgtcaac 360  
 gtttttctga agttgttcgt caatttgaga aaatagcttt tgaagggtgtt aataataatc 420  
 tcgttttagga atcgtcgaga atatatttgg tttctcttgc gcgacacaat aaatcatcgg 480  
 tacttgtgcc attttttg 498

<210> 1546  
 <211> 293  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-029-Q1-E1-H4  
 <400> 1546

tccccaacct tgaggacttt gaccggataa tgaaaagtta tttggatact tcgggcggac 60  
 aattcttgaa agagacttca ccagaagtaa cactgaatt tcggcaggct tttgatgatc 120  
 caagttccgg ggatgatccc attgaattgc caggaaccaa ggttcctcca tggaaccaac 180  
 gggttggccc caacaatttt ggaggaaagg aatttgggtgg gaccaaccac cacccttta 240  
 gggtaaatat gccatatgct tgggtgtaaaa taaaggattg aaccataacc ttc 293

<210> 1547  
 <211> 546  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-029-Q1-E1-H6  
 <400> 1547

aggctcggaa atccggaatc accacgcgtc cgaaaatggg tttgaatgga gtcgacaatg 60  
 gacgtatatg gtttgatcat gtgcgtattc ctcgagaaca cttattggct agattctgtc 120  
 aagtttctgt ggatggaagt tattcttcgg tttataagac tgcggatgag aggtttgcag 180  
 cacaattggg tgctttaact ggaggtcgtg ttagtatttc ccgttccgct atgaatcagt 240  
 ccatggtcca acagagggag tggaaatacc tattatgaac tatcaaagtc atcagatgag 300  
 attaatgcca ccattggctg caacttgtat tatgactttg tgtgccaatc atttaaagtc 360  
 tcgttatcgc aaccgagcca atgagaattt aaaggaattg catatttggg gttcagggtt 420  
 caaatctttg atgacttggc aaatgagaga tactttacaa gaatgtagag aagcttgtgg 480



agggtcaagga tatacaagtg aaaatagaat tggcgtcttg aagagctctt tttgatgtct 540  
attgac 546

<210> 1548  
<211> 441  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> unsure at all n locations  
<223> Clone ID: LIB190-029-Q1-E1-H9  
  
<400> 1548

gccacccacg cgtccggaaa tggactggaa tattttgtcg ggacatttgc actcaaatac 60  
gggaaaccga gataatacat atatgataca tcagttggca agatttggtt acttcaaaca 120  
acctttattc tgataaaaca agtactcaac gcaaacacgc aagtatgggtt gcctttgcat 180  
gcaacatcct ttcttacgag ctataagcgc ttgttggtga agaaggataa ctgctgtagc 240  
tgtaatagct actgtacatc ggataggagc ttgagtaact tggataataa ggagtgggag 300  
ttggttcctg gatataatag aaaccatatt ccagggttga taagagacat tcgaaacacc 360  
actgataaca ctccaaatac cattctggat agtaataagt cattggagga gcttcatagg 420  
tagcatanga gatgggtgaa t 441

<210> 1549  
<211> 415  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-030-Q1-E1-A1  
  
<400> 1549

ggaaggggag ggaggatgat ggtttggttg cggttatggg tggggttgac agggatggca 60  
ggtttcgctg cggcgatagg tgccgtggtg aaccatcct cgccatcga taccatctac 120  
cgaaacattg caccatcgca tttgctcgca tctccaatgg atgaagcgtc gtcgtcggtg 180  
gtaagccgct tatatgccac ctgggtatct ctttcgaccg ttgtgcatg tacttttatg 240  
ctatcttcg agttttcctt gcctctagcc gtcgtcacct tggccaccta tgcgtcgcg 300  
tggtgacact ttgcggtgga aatatttatt taccacacgg tgccgttgaa acctggtggg 360

caagcacctt tgttggttgc ctcggtgtcg ataagttgga tgctgtggga tttga 415

<210> 1550  
<211> 413  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-A11

<400> 1550

tcggcacctt catcgaaatc gtcttcgaaa accccgagaa gagcatagac tccctccacg 60  
tcgatggcta cgccttcttc ggcgtcggga tgggccccgg gaagtggctg cgggaggtga 120  
ggaagacgta caacctgctg gacacggtga gccggcacac gatccaggtg taccgcggt 180  
catggacggc aatcatgctg acgttcgaca acgcgggcat gtggagcgtg cattccaaca 240  
tctgggagcg gtactacctc ggggagcagt tctacatcag cgtcgtctcg ccggcgcgat 300  
cactgcgcga cgagtacaac atgcccgaca acgccctccg ctgctggcaag gtcgtggggc 360  
tgccgctgcc gccgtctac gccccgcgc gctaagacga cgaaggcctc gtt 413

<210> 1551  
<211> 108  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-A12

<400> 1551

gcacgggaca aaaatgaaca aggcgttcac gctcgagaag cccatggacc tgaaaaaagg 60  
cgtgaaccac gtcgccgtct tggcgtccac gatgggaatg atggacag 108

<210> 1552  
<211> 414  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-A2

<400> 1552

cacacgcgtc cgaaggaact aggcaaaagg atatggtatc tgcggtagaa catatgaaag 60  
aacgtgctgt gaagtgagag aacgtacgag aaagccaagt gaggaaaaga aggcaagtag 120

agggcgggccc gagaaaggag agggcgtaag acgtgataca gagtaggaag aaaagagaag 180  
 agagctagaa aggaggtaaa agaagagtaa aaggactaga agaggtacgg aattcacgag 240  
 gaaggagcgt gaaggaagga ggaatcccaa gtaatcgagg aagaaaaagc ttcggtgaaa 300  
 gcgtgaacgg attttgtaca cactgcccgt caagttctgg aagtgtgcta ggaataagca 360  
 ggagaagtag aagagagtag gaaaagaaga aaggaagtga agacgtaaga cgtg 414

<210> 1553  
 <211> 442  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-030-Q1-E1-A3  
 <400> 1553

cacacgcgtc cgcccacgcg tccgcccacg cgtccgcca cgcgccgaa cagcaatgtg 60  
 taaagtatgt ggctcaacaa gttatcgac ccaacaatg tgtcaagtac tataccgagc 120  
 agaagattca acaaaagtat tgctctcgct atgttactga agaagaagta caaagcaagc 180  
 agtgcacaa gtatgtatct cttcagaaga tcaagtacga gtcttgctct gctcaatatg 240  
 aagttcaaaa gatcaagcag caacaatgta ctatgacagt ctctgaacaa tacatacagc 300  
 ccgatacttg ctacaagtat gtccctgaac aacaattggg gcctcatact tgttacaagt 360  
 attattctgt acccaagttt attgaaaagt gctatcctca gtatgcaaca acggagaaat 420  
 gtgtaaagta tgagtatggt cc 442

<210> 1554  
 <211> 273  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-030-Q1-E1-A4  
 <400> 1554

acgcgtctga acattttgag gcttgaccga gttgagttct gaaataactt tatcataagg 60  
 tgtcaagtat ctcgattcag aagttctgtc tactcaagga gttttacttg gcatttcact 120  
 tgcagttatt ttattgttct gcgtgaccac ttaatggaat tagaatgaaa gctcttactt 180  
 aaaataaaag tagtactttg agctttcaaa accaaaaaat taaatgcgaa tcagtaccat 240

tggtattaag aattgccgtc ctacctgtaa tga

273

<210> 1555

<211> 406

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-A5

<400> 1555

cacacgcgtc cgcttttggtt ggctgcataa taacgcagtg gcctctttct tttttggggg 60

ttcgtttgcc gcgcaactgc cgcactcagt tttggtggga caagttggct gcaccatgca 120

cggaaattca gtggttggtt ttgtcagttg acggaagttt tgcttgtatt ccatctagtt 180

gaaatgaagt cggtttatgg tggattgtcg tcaacaacaa cgaccaccgt ctagtgcccg 240

tgaagaacca caaccatctt tgcaaccttg ttctgggata caacgactcg aaaaagacgc 300

ttgatgatat tttagtttgg caatggcgtg caagttcgtc gtggaacctc gatggatata 360

cttctgacc gtgtattcaa tgttttttgg tgtagtagtt actggt 406

<210> 1556

<211> 424

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-A7

<400> 1556

cattgggtat gtggtttctc ctttttttga ggcaccaaga tacgcgaagc actgaatatt 60

gcgggaactc tgctatttcg tttcttctat ggtcctgggt tgggtcccgt tccttggggt 120

attgtagcgg agatctatcc ctggtatggt cgttcgcaat gtctcacgtt gaactcgttt 180

atcagttaca tgctgaattt cgtcgtttct ttttcatggc caacgatgct caagtcgatg 240

catgcacaag gcgcgttttag tttcttttga ggttttacgt tgttatccac ttgctttatc 300

tatttgtttg ttccagaaac caaaggcgtg gaaatggaag ccattcaaga attgtttcaa 360

tatccattgt atactattgc taagaagaat ctaagggaaa ccaaagcgta tttgagcaag 420

tttt 424

<210> 1557

<211> 420  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-A8

<400> 1557

caacacaggt actcgaggag aaaggagacc caaattaagg tgagagaatg gacgataagg 60  
aactaggcaa aaggatatgg tatctgcggt agaacatatg aaagaagcag caccgactgt 120  
ttagcaaaaa cacagcactc tgcagaaaag agaaaatgta aagtatagag tgtgcggcct 180  
gccaaatagt agagaagaaa tcgatgaaag tgaaagcgag taaaagatga ggtatagaga 240  
atggcggtcc taactgtaag gatccaaagg tagcgaagta aatagacgtt tgaaaggcgt 300  
ccagtatgaa aggagaaacg agtgtagcac tgtctagtcg tccaactcag cgaaacagca 360  
ataactgtga aaatgcagta aactagcagt aggacggaaa gagcccataa ttcttgacta 420

<210> 1558  
<211> 420  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-A9

<400> 1558

ttaaccggtg gttcaacctg gctaataagc cggcgtgccc ttcgttcttc ctcgtcccga 60  
tcccgcagac gctccgttcg gctccggcaa accacatcaa gtcgcgatgg agatgaagaa 120  
ggtcgcctgc gccgtcctcg ccgccgccgc ctccgccacc gtggtcctcg ccgccgaggc 180  
ccggcgccc gccccacca gcgcctctc ggccgcgttc ccggccgtcg gcgccgtgct 240  
gggcgcctcc gtgctctcct tcttcgccta ctacctgcag taaaattaaa ggaggatcgg 300  
agggagaggc tgctggctgc cattgcctgt attcggttg attccgttta tatatatagt 360  
taagtacttt aatttgggtc tgaacatgtc gattgatcca ttcattttat ttgctttgcc 420

<210> 1559  
<211> 452  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-B1

<400> 1559

cacacgcgtc cgaaaagaaa gaaattagac aaaatcctca taagattatt cgaagactct 60  
tgtgtaacca atcatgttgc tcgagcattt gactttgcta gtagactata ttcttacaag 120  
gcgtacaaaa ttgcctgtca agtagcaaac caccataaat taggtgcact cgctcaaaaa 180  
gtagagtcac tgatggatca atgtcctgaa attcaggaaa cgaaaagttg tcttgtggat 240  
gattctgcgg agtctccaac gatacaaca cataacaaca atgagaacat acctgttcgc 300  
gccaatcaga gtacagaagc tattcaggtt gtacaaggag atcttgctat tcaagacaaa 360  
gcacaaggta tcggtgcac tcgtttggta actccatcga ggattcaaga aagaaagccc 420  
aaactgcaag aaatggcaaa ctgccttgat ac 452

<210> 1560

<211> 461

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-030-Q1-E1-B10

<400> 1560

tacggtcgca cttccgggtc accagcgtcg ataaccaga ttccaccaat ctaatacggc 60  
ccaatctaaa gtgagctact taacggacta gttaatacta gtgaaataga ttagaccctg 120  
ctggccatgt tttaacttaa attagtagat cagaccaaac caccatgaa caaataactt 180  
accagcatat tcatggtgac caccctccc atcctagatg ttgccataat acacttatct 240  
tatgccacca gcctgttaac catctgtcct tacctacaag ttatcctaac tacatgtccc 300  
taattcggat aaagacttca agaacgaaga tcgaagatga tcgagctcat caaatcaagg 360  
aaggataagg ttcaagctag atcttcaaaa gtaatcaaga ttcacaatct tggatagagt 420  
ctttcctagc cctacccttt cataancaa cctatctatg c 461

<210> 1561

<211> 363

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-B11

<400> 1561

cttcggaatt cctcactgaa aaaggttact ccttcaccac ctctgctgaa cgcgaaattg 60  
taagagacat caaggaaaag cttgcatatg tggctcttga atacgaccag gagctcgaga 120  
atgccaagag cagctcatct gtggagaaga gctacgagct gcctgatggc caggtgatca 180  
ccattggggc agagaggttc agatgccctg aggtcctctt ccagccttcc ttcattggta 240  
tggaagctcc tggcatccat gagaccacct acaactccat catgaagtgc gatgtcgaca 300  
tcaggaagga cttgtatggc aacattgtgc tcagtggcgg cagcaccatg ttccctggta 360  
ttg 363

<210> 1562  
<211> 431  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-B9

<400> 1562

ccctcgctgt cgtctcactc accccgcctt cagcctccc tcaccaaata aggtcccgcc 60  
cttttccgac attcacaggg gggacaggaa atcagcggcc atggcctcga ttccggcgac 120  
gaccttcgcc gtcattctat ccgtcctcgt ctgtgccgag gctggcaccg ccgtcgacaa 180  
cgacctccc gactacgtca tccagggccg cgtctattgc gacacctgcc gcgccgggtt 240  
cgtgaccaat gtcaccgagt acatcgccgg cgccaagggt aggctggagt gcaagcactt 300  
cggcaccggc aagctcgagc gctccatcga cggggtgacc gacgggaacg gcacgtacac 360  
gatcgagctc aaggacagcc acgaggagga catctgcgaa gtggctcttg tggagagccc 420  
gcgcaaggac t 431

<210> 1563  
<211> 435  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-C1

<400> 1563

aaagtatcgg tagaacagcc tgtgtatgag gttgaaaaga agaccgcaga atatgagata 60  
agaaagtacc ccagcttaag aatagctgaa gttcatcggt cagactggaa aaaagaagag 120

aatggctcgg catacgactt tgagtcgcaa gcatttcgag tgttggcgtc gtacattggt 180  
gtatttgagg aaccccaaaaa caaagatagc tccaacacgc atgttaagat agcaatgaca 240  
gcacctgttt tatcacagcc cataggggtcc gtggaaacaa gaatggacga cagcagtcta 300  
gcgtttatat tgcccaagga gtagtcagag caacaagaac ctccacagcc attagacca 360  
cgagttcact tgcgtattgt acctgtcaga aaagttgcag cgactacttt tagtgggtact 420  
gtcaatcgtg aaaca 435

<210> 1564  
<211> 464  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-030-Q1-E1-C11  
<400> 1564

ttcccggggt caccacgcg tccggaggaa cagccaaca agtacaaggt ggtggacgcg 60  
gtgacggtgc tagagatgca ggtggacgcg ttcaagaagc gcgtaaggc ggcgcggagg 120  
ctcgccaagg aggaggtcaa gacggccgcg acgcccagg cgcgaggggc gctgaacctc 180  
tgcaagacct actacctgga cgccgccgac aacctcggcg cctgcaagcg cgccatcggc 240  
ttccgcgacg ccgtcaccat ccgcgccacg atgagcatgg tggcgcagga cagcagaac 300  
tgcgacgagg agttcaggaa ggccgtctcc aagaaccca tggaggacca caacaggtcg 360  
ctcatcgaga tgtccgagat ctgccgcag ctctccaaca tgatccctta cgaacatgtc 420  
cattgatttg tttgtttctt tttcccgacc cctactacg ttcg 464

<210> 1565  
<211> 257  
<212> DNA  
<213> Cyanidium caldarium  
<223> unsure at all n locations  
<223> Clone ID: LIB190-030-Q1-E1-C3  
<400> 1565

tacggtccgt atctcncgng tgcgaccacg cgtccggaaa tcatgaaatg gtttttattg 60  
aaacaagaaa acccaaagat acctcttcaa caacttagtc cactacacga tacactgttt 120



actagaaggg aaacttttat tgtgctaata cgagcttttt gacccttact cacacttttt 180  
 ttcggaagta tctgaaccac ctggcagtgg tatttgctga cgtccacttt ggtaaatttg 240  
 tgacttgctc ctttaca 257

<210> 1566  
 <211> 440  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-030-Q1-E1-C7  
 <400> 1566

catgtgcaag tcaacaaaca tagaaaagta aagagattgc aagaagataa tattttgaat 60  
 agagcactat cacaaccagg agatgtatct ctgtgctttt gcaacatcca gttgttggtg 120  
 aatgcagaaa gagctattat aggaaatatt acttgtccag aaagtatcga attgtgtcgt 180  
 ctattagctg gacatatagc ggtttgggtc gatgaacatt tggatgactt tcgtttggaa 240  
 gctatcttgg gagcactatt gtgtacttgt tattgtgagt ggaagcgttt tgaaggagaa 300  
 ttgggggtac aagaatggaa tgaattggag aagatatctt ccttagatac ttggaagctt 360  
 gtgcttggtg caagacaaag agtggataat atgttacagc gagtacacaa gctgacgagc 420  
 atcttgcctt ttttatactc 440

<210> 1567  
 <211> 288  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-030-Q1-E1-C8  
 <400> 1567

gttatggaag agtaggacgt ggaggaggtc caggtagagg tagagctcga ggtggagccg 60  
 gagaatttgg ctatgccttt taagttggca gtcactcttt cgcatagaaga ctacgaaagt 120  
 ctcgtagtct tgataaacia ccttatggaa tgatagacca agttacaaat gtttgtttgt 180  
 ttttgtttct ttttgtgtga gttgtgtgtt tgaatatttg ttcttttcat gagaagagtg 240  
 tcttacctct gccttgataa aagtagccaa acggatggat tggtcgcg 288

<210> 1568

<211> 409  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-030-Q1-E1-C9  
  
 <400> 1568  
  
 cggggccaac caagccttcg gacaagcctt cggggcgctc gtgggttcat ttcttcccc 60  
 cttctctcgt cacgtccaat aaaaaggggg gaaaacttct ctctcttttt ttccctcccc 120  
 cgcccgaatc tgatgcttaa accctcgccg ggaggaggat tccaatcccc acgcaccagc 180  
 ccgcgcccgc cacctacagc cgcgcccga tctccgccat ggccgcccgc ccgcaccagg 240  
 cccagggccc cgcagatagt gtgattccgc tgcagtctga acctgcactt gataataatc 300  
 cctccaagag tgcaaacgct agggaccaga ttctttctgg tacggagaat gtgactacag 360  
 gcaatgcacg cggcggcagc tccttgaaat cgcaaaaagg cccgccaga 409

<210> 1569  
 <211> 225  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-030-Q1-E1-D11  
  
 <400> 1569  
  
 cacgcgtccg cacataacta acctattgta ctctacaata atacaaaaac ggaaccctct 60  
 ttccaaatcc ccaaaaattg tatctcctag tttgaaaaac tatttcacat cacttcatgg 120  
 tccggtggga ctccctggat caatgatcgt taatttgggg agtgattacg aattgcacta 180  
 aagattcact gttcagttcc cattaactat acaaatcacc ccacc 225

<210> 1570  
 <211> 105  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-030-Q1-E1-D2  
  
 <400> 1570  
  
 acgcgtccgc gatagacctc tgcccacgcg tccgctcacg cgtccagctg attcttgggc 60  
 ttatctcaca agtctgggtgc cttgttaact gtacgagcat acttc 105

<210> 1571  
 <211> 400  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-D8

<400> 1571

cacacgcgtc cgcccacgcg tccggaaaag gccaaattgt tggatgccaa gtttctaagg 60  
 aagtattatg aggagaacaa ggacttcttc ttcttgctga ctagagaaga gaagaaaatg 120  
 tttgtgacgt tacaacttgc cagggaatat gcagagctgg tagatgacca attcttgaag 180  
 ggcllcttcg agaaggtctt ggagtctgct cagaagacgt ttttaatttg caagtagagt 240  
 gtagtgtgcg tttttctgtg tgtatttgc tctgtgtgtg tgtgtctgtg tgtgtaatga 300  
 gtggagccga gtcagagaaa acggcttggt tctttcctgt ggacatagtg ggtaaagtct 360  
 gatgggtttc tccacggctt tttagtaa at aaaagttggt 400

<210> 1572  
 <211> 377  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-030-Q1-E1-D9

<400> 1572

taccggtcgt acnattccgg ggccaccac gcgtccgaaa agaactaccc tattgtactc 60  
 tatataagag atatcgagaa gttccttcac aagtcccaa aaatgtatct cctgtttgaa 120  
 aaactattaa acaaacttga tggaccggtg ttagtccttg gatcaaggat tgtagatgtg 180  
 gagagtgatg aggagttgga ctacagattg actgttctgt tcccatataa tatagaaatc 240  
 aagccacctg aaaacgaaaa ccaccttgta agttggaaat cccaattaga agaagacatg 300  
 aagatgattc agtttcaaga taaccgaaat catattatgg aagtccttgc agaaaatgat 360  
 cttgaatgtg acgaatt 377

<210> 1573  
 <211> 271  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-E1

<400> 1573

agattatgat acttttgtga gtgcatatga cgatgataga cgaaagaggt tgtcttcctc 60  
ccacaaggaa gaagatagca agtcgagttc atcttccaag catgacgaag aggaagaaga 120  
agaaggagat gacgattctt cttctcatgg tggaaagaaa aaaggtcgtc acccaccaga 180  
tggttttcta cctgaattgg cataatcttg tttgtattgc tatgtatgta tgtttgtagg 240  
tgagaggcgc gaataaattt tccttttccc c 271

<210> 1574

<211> 438

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-E12

<400> 1574

aaattttgaa tcgatcttgt ccaagtgaga atggcggcaa agaataaaaa ctcttggtgt 60  
atgcttttgc aagtgaagag actaagcaag gacgctgttg tacctcaaag aggttcgaaa 120  
cttgctgcag gttatgacat ttgttctcgc gaagactgta ttgtaccagc tcgaagtcgg 180  
tactgtgtta aaactgactt ggcagtggcg attccctcgc gacactatgg aagaatagca 240  
cccagatcag gacttgcctt aaagcatgga atcgacgtag gagctggtgt tatagatgag 300  
gactatcgag gaagcctcgc tattatttta tttaatcatt ccgaagagga tttccatata 360  
tccaagggaa atcgaatagc tcaacttacc ttagagagaa tatctactcc cgaagttggt 420  
gaagtggata atctcgat 438

<210> 1575

<211> 255

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-E2

<400> 1575

acgcgtctga agatatgata cttttgtgag tgcatatgac gatgatagac gaaagagggt 60  
gtcttctcgc cacatggaag aagatagcaa gtcgagttca gcttccaagc atgacgaaga 120

ggaagaagaa gaaggagatg acgattcttc ttcgcatggt ggaaagaaaa aaggtcgtca 180  
gccaccagat gggtttgtac ctgaattggc ataacttctg ttgtattgct atgtatgtag 240  
gtttgtaggt gagag 255

<210> 1576  
<211> 449  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-030-Q1-E1-F1  
  
<400> 1576

cagacgcgtg ggcaaataca taagcaggag gagcctttgt atagccatct ggattcatat 60  
ttgattgttg agtatttggga taaagaaaca tattgctgta gggtcgaaaa tcgttccacg 120  
accactgcga aggtgccggt gatgggtaag ctgtctcgac ataaaaagag cgacccactt 180  
ctggcgtttt gtccatatca gagttcttct cattcttctg ctgggggtgga aaataggaag 240  
acggagaatt ggcattctatt tgaggaccgt agaaataatt tgaaggtctc tctatctttg 300  
caggttcact agtcattgtc atatcgaaag gagctgttct tgatgagtta ttttcgtgta 360  
tagtaacaga attcggagtc ctgggtgtctg tcatgttctt ctgggaagtc gctacagaat 420  
cgctctttga aggaccgccc ttcaatgaa 449

<210> 1577  
<211> 194  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-030-Q1-E1-F10  
  
<400> 1577

aggtgcggct gagatatcga gtgttgtgca tgtgggcatg acagtcggcg acgacgagaa 60  
tgtagccctc gtagcttctg cataatgtc ctgcgcagta ttcgaggatg gggtcctttg 120  
ggctctactt cgctaagttc gggcgccggc tcgttgatct tctcctgtgc aagctatgta 180  
cgggtgaccc cgtg 194

<210> 1578  
<211> 155

<212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-F2

<400> 1578

gcgtccgcac aagcgtccgg aaccaaata agcaattgta caagttgcca ctccgtcttt 60  
 tgtaacatag ctcccagcgg cagttattgc cgagaaaccc gttgcacctt gataaaatcc 120  
 tggagcagct agagataact ttggagtgat acttt 155

<210> 1579  
 <211> 105  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-F3

<400> 1579

cgaaacatct aatcttcatt gtgtcacaat gacctaacca ctttgattca cattcaaagt 60  
 gaaaataact ggctagctcc ttttgtgtta cattgcaatg ttta 105

<210> 1580  
 <211> 456  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-030-Q1-E1-F4

<400> 1580

cttcgcctag gaaccacaaa ctttgtactg ctgtaacatt ttatggctac tgaacaagtg 60  
 actattttaa aggataagcc aagtgaactt gtaactttgt agaacggttt gggccttgta 120  
 gcgagatagg attgcatcta gcaacggcag ggatttcatt gtcgaaaagg agcgtgaaaa 180  
 cgtatcactt ttatccgaat ccttcaacta catatgtaac gacatatagt gaatttttagg 240  
 agccacgagg aaagtttcca gcaattatcc tttatgtagc gaaaacgaag cttacatca 300  
 aacatggcaa gggacaagac tctggacttg ttagagcgac gaaggttttg tatcacgagc 360  
 cgacaaagaa cccttgcatc cgtcattttg aggctttacg tcagtttntc gacatgcaaa 420  
 aatgttacat ttgtaataaa aattaaacat ttgact 456

<210> 1581  
 <211> 443  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-F7

<400> 1581

cacacgcgtc cgccacgcg tccgaaatac acttcgattt atggttggca atttatatga 60  
 ttttagaaaa caagaggatg ccatttcttt agctgaatta cccgaattgg acaagtatat 120  
 gtcctgtata tttggcaagt ttaaggaatc cgtggagaat tggtagagc gatacgagtt 180  
 tacctttatt tatcaagcac ttcagcgaact ttgtattaca gagttgagca actttttattt 240  
 ggatatttca aaggatcgct tctatgtctc tgctcctgat gattttcgct gtcgaagttg 300  
 tcaaactgtc ttacatattt tactagaaga cttggtacgc atacttgctc ctattcttcc 360  
 tcatactgca gaagaccttt ggcaatgttt tgagtctcga caagatgtga atgctgcttc 420  
 tgtatttcag tctggttgga tat 443

<210> 1582  
 <211> 458  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-G10

<400> 1582

acgggtctata tccgggtcac aacgcgtctc aaaatttgca gaagaatgtg gtcacaaga 60  
 acaacagttt gcaagaaagc tccacttgcg ttttttatgg actcctatag cttttcaagg 120  
 ttataacgac aacacgaaag tagagaatag acacgaaaat agactttgct ttacagtgtt 180  
 caggcgaaat cgcctcaccg gttcaagtgg aaggcagaaa ccagttctgt tagaagagtc 240  
 agctggcaac gtctattgga accaatcttg tgagttggct tttaggagta taggttataa 300  
 aggcaagccg tttgaacttg ttccctttga cgaacgagct ggagtcgttc ccaataagtg 360  
 tggtcgcgtc ttgagccgag tcgaacaaac ctcggaagaa gaagagttgt ttgaaaaggg 420  
 actgtacgtt gttggctggg tgaaaagagg accaacag 458

<210> 1583

<211> 444  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-030-Q1-E1-G11  
 <400> 1583

ccacgcgtcc gcacacgcgt ccggggcgggt ccgttccccg gggacggcgg ccccttcaac 60  
 aacctcgact tctgctgcta ctgccacgac atggcctacg acaccacga ccaggcccag 120  
 ctctccgcg ccgacctgc ctctctccgc tgcctcgagg gcagccggca cagccccgcg 180  
 cgcgacggca tcgccgcgc agccatctac cgcgccatgt gcattctcgg actgaagacg 240  
 atcctgatcc cgtaccggac gaacctcgtg cggctacaga cggggcccaa ctacgcggat 300  
 ttcttcgccc atttcgtgaa gagggtcgcg tcgtcgtcgg gcaggccgac cggcggcgag 360  
 aagcagaggc tgtgaacgaa tttgctcgcc tcgtcctaca tgtaaattgt gtagatcgag 420  
 ccgaattggt tggggccttg gggg 444

<210> 1584  
 <211> 470  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-030-Q1-E1-G12  
 <400> 1584

tacggtcgta tttcccgggg cgccgaacac gcgtcaaaag ctcttcttta tattctttgt 60  
 gcttggacaa tggttgcaa gactgctctg agttgcctct ttctctcttt ccttatcgct 120  
 gccgcagttg cagccgacgt agtttcagag gagagatggg gatatgctca gcaaacccaa 180  
 caacagcaac agtgccaaca agtatgtaaa cagtatgcat actatcagag tccagtctgc 240  
 atttccgtaa ccacacagag ccatactgg acccaatgct cgaagactgt gcaaaccttt 300  
 gtcccaagcc agtgcagtac ttatacccaa tctctacat ggacctattg cagcacctac 360  
 accaccacta gcgtaccatc tcaatgcagc aaggccgtga ctacttatac tcaaacctgc 420  
 tgtgcttatg cccaacaaac ttcctatgca gtcagtaccg agcaatatgt 470

<210> 1585  
 <211> 417  
 <212> DNA



<213> Cyanidium caldarium  
 <223> Clone ID: LIB190-030-Q1-E1-G4  
 <400> 1585

gcgtccggcg tttctctcgt tcttttgtgg taagagctgg cgggtgtggga ggtgtttgga 60  
 aagtgtccaa ccaagtgaat ccatctcgac tgcagcgctt ggaaaggaac gaaagagtgc 120  
 gaagagcagg ttgggaactt tatgactcca agttgccaaa ggaacttcga gcacaattaa 180  
 tgccaagttc tgacaaggaa gtacgaagct ttgtggaaat gagaatacgg gaaatgatat 240  
 tgaacggaga ctttgaaaat ttaaaaggca aaggaaaacc attcaactat tctgatgctg 300  
 cagtgagtac ttttgatgtg gctatgaaga tgcttaaaaa caatgatttg aagccacctt 360  
 ggtaagttga caaggagata caagtcgtac gtaatatttg taggattgag ttgatgc 417

<210> 1586  
 <211> 414  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-030-Q1-E1-G7  
 <400> 1586

cccacgcgtc cgggtggtga tgccctggat tgagctacgt agtggcaact ccgctgtctt 60  
 gaaagacata actgcaagta ttgaaaagcc tgacataaaa tggataacta ggacgaatct 120  
 cagtacttgt ctgaattctg cagaaggaaa tgttacggtt gacttgtcgc ggcagtgtag 180  
 cttgaaggat atattttcat tgaagcttct cgacaataac tttaagttgg cgtgttttaa 240  
 tgatgccttg tttttagttt taccaggctt atcctttgtt attactggta atcgtatatt 300  
 ctgtagacgc tcggacttga atgaaacgga agcattggag tcctgctttt cgtttatgaa 360  
 gatatgcccc acgtacaagt cgttggagat tctttttgga agcgagcaaa ttta 414

<210> 1587  
 <211> 459  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-030-Q1-E1-G8  
 <400> 1587

caggaagta tgaccagta atgaggagt gagtaaacag aaaaggaagt aaaaggagg 60  
aatgaagga agttatggca aaaacacgtg ccagcagcag cggtaaaacg tgtgtagcaa 120  
gcgtagagca gaagaactgg gtgtaaaggt cgagtagtag agtaagtgtg aaagggaaag 180  
gaaaggagag aaagaggaaa gggatgaaat gcagagatct ctagagaaag gcaagaaaga 240  
aaagaaagga agacacagta aatgaggcga gaaagcatag gaagtgaaac ggattaggaa 300  
cccgtgtagt ctatgcagta aaagaaagaa tgagtaagaa aaaaggaggat cattccacca 360  
ggggagtaaa ggcgcangan agaaacccaa agcaattgac gggaatcgga aaaaggggtg 420  
gatcacgtaa attaatccga tgtaaaccga gaaccttac 459

<210> 1588  
<211> 266  
<212> DNA  
<213> Cyanidium caldarium  
<223> unsure at all n locations  
<223> Clone ID: LIB190-030-Q1-E1-G9  
<400> 1588

tacggtcntg atcttcccgg ggtcaccac gcgtccgaac acggtccgg gcgactgtga 60  
ctggtggagg tggtaggctt gccggcaaga ccatgctcct ggacgtggcc accgtgggcc 120  
tcgaggacga gcgcctcggc aacgtggaga cgaccgcgt gatcaagatc acgcacctcg 180  
agatggtcag cagcatcgtc ggctccatcg acggcatcat ggcccagtag taaggccgcg 240  
gcgaccaggg cgacatgagg ctgcgcg 266

<210> 1589  
<211> 419  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-030-Q1-E1-H10  
<400> 1589

cgcgccagc gcaatgacca agaatacct gctacgccga acattgtgtg gttcttcttc 60  
agcgacaaca ccaagaatac gatattttgg aaaaccagat agatccaaat acttgccatt 120  
tgctccttgc aattcgtaa agctatcaca agaagagttg gaacgattgc cacctcaagt 180

gagacaagta ttggaaccca agtaatggga tggaagaacg tatttgaagg caaatatatg 240  
 gaatgcagtg ttggcatttc aacgaaaacc tggagatact gggtcggcag aagtacaagt 300  
 tgcggtgttg accaatagaa tggaagcatt ggagaaacag tgcaaaaagaa aacaagatga 360  
 tacgagagca aggtacttgt tggatcactt tacttcgacg agacagagac tgttgcaat 419

<210> 1590  
 <211> 255  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-030-Q1-E1-H4  
 <400> 1590

tggcaccga taaggatttt ggtaggatat ataatacacg gtatggcaag taaagtggga 60  
 catgtacgta taatgaggac tacagagaag agtacgttag tgataacgtt gggaataata 120  
 atatgaggaa tgtggtcgat cgaactagaa agatggcgaa gatcctggag ttgggatgga 180  
 gtaaaaaacg tgcccatgac tatatggctg atgataataa ttgggataca cattggaacg 240  
 actacgggaa taaac 255

<210> 1591  
 <211> 462  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-030-Q1-E1-H6  
 <400> 1591

ttccgggccc acccacgcgt ccacagacgc gtgggcaagt agaggattta ttggaacaaa 60  
 atggaatcca gaataagcgt gtaagagaat tcattttaga aaatttaacc acggatgatg 120  
 ttcatectaa gacttttaa tggcgcgtga acgtttctgc tttattgaat tctatgaata 180  
 gaatactcga atttcctgtg aaagaaggga aaacatactc tcgcccgcg ctatttatcc 240  
 gaggagaaag atcaatttat gttatgaatc cgtccgctga aaaggctatt cggacttttt 300  
 tcccaaaagc agtcattgaa acaattgaag gagcaggaca ctgggtaacc gttgaggcac 360  
 cagaaaaatt ttgtgcagtt gtgaacagtt tccttcataa ctcaactgac ttgcgtcaaa 420  
 ggggcagttc gtttgtttga gttagtttca catccaggac ag 462

<210> 1592  
 <211> 431  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-030-Q1-E1-H7  
  
 <400> 1592

caacaaaatg ccaactcttt tcggaagaga actggtgctg ttcgtaaaac tctagagtct 60  
 aagtgttaact gcactttaga atatatcgat gcacctcata cagtggaacc agctggagaa 120  
 attctgattg aagaaacagg agaacgaaag tggattggc cacagcttg ttggtggaag 180  
 gcttcttcgg atggaaagca ctatgaaggc tgggaggaaa ctgtcgaata ttgaggagt 240  
 gtgtttcggt tgcagggtcc ttttgaagggt gttttgggat ttagtcaagg agcagccttg 300  
 agctctctca tttgtgctat gaaagaacat ccagaacttg gctatggaga attttcttgc 360  
 atccgatttg cccttgtttt ttcaggtttc gtttcncgtg cagaagagca ttgcggttg 420  
 ataaaaacaa a 431

<210> 1593  
 <211> 437  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-030-Q1-E1-H8  
  
 <400> 1593

acgcgtccgc aaacgcgtcc gggacggaaa aagacaaaaa tacgatcgat gcagatgaaa 60  
 agaagagaaa tcaaaagttg actttttcaa caatagtcaa cgacgcattg taagaaattc 120  
 cttttcgaat tcacaatcaa aaactttttt gattcctttt cgtacatttt ggattgtggc 180  
 acacaacatg aaaattcctg tccgactcgt caagttttct ttggaaaaaa agaagccaac 240  
 ttgtttcaac agaagtataa gtggaatcgc ctacactttt tctcgccatg gacaggtttc 300  
 tgatgtcttg aaaaaggaga ctcaaagcta tgatgagaag aaacttggtc cttcgcaagt 360  
 actcgtgtcg tttcttgctt caagtatagg cacaacagat ttggcgtgga taagaggtat 420  
 gggaaagata acagaag 437

<210> 1594  
 <211> 426  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-A11

<400> 1594

cccacgcgtc cgacagggaa gtatgaccca gtaatgagga gtggagtaaa cagaaaagga 60  
 agtaaaagga gggaatgaag ggaagttatg gcaaaaacac gtgccagcag cagcggtaaa 120  
 acgtgtgtag caagcgtaga gcagaagaac tgggtgtaaa ggtcgagtag tagagtaagt 180  
 gtaaaaggga aaggaaagga gagaaagagg aaagggatga aatgcagaga tctctagaga 240  
 aaggcaagaa agaaaagaaa ggaagacaca gtaaatgagg cgagaaagca taggaagtga 300  
 aacggattag gaaccctgtg agtctatgca gtaaaagaaa gaatgagtaa gaaaaaaggg 360  
 agtcattcca ccaggggagt aaaggcgcaa gaaagaaacc caaagcaatt gacgggaatc 420  
 gcgaaa 426

<210> 1595  
 <211> 457  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-A3

<400> 1595

gggtccaggc acgcgtccgg aataatacgt gtagtaccag aatattcttt tgcgctgtct 60  
 accaaagaga ggtgtccgtt ttacttgta tatgaattgg aagatcttgg accagaagga 120  
 gttagctcac caagaaagac acatcatgaa gaggatccta cttccaatga gttgtggtct 180  
 gtggaagaat ctggtcaaaa tagacatagc gaaagcgatg gaagaagaac ggatagtgag 240  
 gagggaagct tatcaaagaa atttgccatt accaaacgtc ttggaaagga aaattctcat 300  
 cagatgagac gaacagagag agctgcaatg aagaaagagg cagttgcact ggcagcagga 360  
 ggtgcttttg agaatgaacc taatcgccg gacgagtctt tcaactttca aacaaatgta 420  
 aataccgaag aacagggttac tgggaatgac gatgtgt 457

<210> 1596  
 <211> 436

<212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-031-Q1-E1-A6  
 <400> 1596  
 gattggtggc gagttgagct ttgttttggg actgtttttt gtggggtttca ctctgtgtgt 60  
 ttgtcttttt aaattcgaag actattttatt tcttggttatg ttttagaggt gtttctagag 120  
 tgtgtttttg gagttgttgt actcctgtcg tgggtggttg tgaatggctc tagtgacaaa 180  
 gagcattgtt actttccgc cattctccac agtccaacc accaacttgt atacgcacac 240  
 atatacataa ccacatatta ctagagagtc gtggtgtaaa aaacgacaat tcgaatgggt 300  
 gaaaaggctt gataaaaagc aaaggactag tgaagggtgt agagaaagca cttggaaaag 360  
 ggggccactt ccttgatat tttgtctct agtaactaac taattccgct tggagatatt 420  
 gtaagtttgg tgtatt 436

<210> 1597  
 <211> 196  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-031-Q1-E1-A9  
 <400> 1597  
 ccacgcgacc gcacacgcgt cgcgccacgc gtccgccac gcgtccgcaa aaaatatatt 60  
 taataaaagt aaaaaacca ttgtaaaata tggaaattga atataaaact ttaacaaatt 120  
 aaacatgaaa aataaatata aatctttata aagtgtgtta aaacataaaa tctccagaaa 180  
 tgatgcatta acttct 196

<210> 1598  
 <211> 442  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-031-Q1-E1-B1  
 <400> 1598  
 cggggccagc acgcgtccgc acacgagtc gcccggttg agaccgcaag tacattgctt 60  
 cttgtttcca acaagagatg gccgaagtaa agttgtttta caaatggtct tttgaagacg 120

tcgaagtcaa tgacatgtct cttcacgatt acattgcagt gaaacaaaag tatgctgttt 180  
 atttacccca tactgctgga agatatgccg tcaagcgggt ccgcaaggct cagtgcccaa 240  
 tagttgaacg cttagttaac tctttgatga tgcacggcag aaacaacggt aaaaagttga 300  
 tggcgggttag gatcgtgaaa caggcttttg aaatcattca cttgttaaca gacgccaacc 360  
 cggttcaagt atttgtccaa gctgttatga acgctggacc tcgtgaagat tccacccgaa 420  
 tcggctctgc tggtagacga cg 442

<210> 1599  
 <211> 352  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-031-Q1-E1-B10  
 <400> 1599

gaatagacgt cctctcactg cttctgtctt gaactatcca tgggaagtga tcatatcaag 60  
 ctggcaggac gactaccgta ttggtactga gaaaacgtcg aggtttttga tgtcagtact 120  
 agcgcgtatt gcacagtgtc taaggcggta tgaccaagtc tcggtgactg tagtaagaac 180  
 ttacgcac tcctcgcgag aattgggtcca atttgggaca taaagtcgtg acatcaacat 240  
 gtctgaaacc tgtctgtcat gcttatagca caagaactgg gtgtaaagggt cgagtaggat 300  
 actacgtgtc atatggaaac ggcaggatag acagatgaat gggatgaaat gc 352

<210> 1600  
 <211> 378  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-031-Q1-E1-B3  
 <400> 1600

gcgtccgcag ttatgcactg ttattaagga aattcttggg gacaaagtgg agaagggtgg 60  
 agtttccgaa agacttgcgg aatctccatg tatccttgtt actggtgagt ttggttggtc 120  
 ggccaacatg gaacgtatca tgaaggcaca agctttgcgt gattcgtcct tggcaatgta 180  
 catgtcatcg agaaagataa tggaaattaa tccaacaat gccatcatgc aagaattgcg 240  
 tcaccgtgtg gaagcagaca agtcagacaa gaccgtgaaa gacttggtca atttattatt 300

tgacactgca ttgttgactt ccggattctc tcttgacgat cccaacgttt ttgcctctcg 360  
tattcatccc atgattaa 378

<210> 1601  
<211> 300  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-031-Q1-E1-B8  
  
<400> 1601

tagggaacac ttcatatcgc actgctttgt gctttcgctt cacgcatcac ctgtaaaaaa 60  
aaaatgcaag tggatgatg ttaacgcaa aaaataaagt ctttgctttt tatttttgaa 120  
aaaaaaaaa aaaaaaaag aagaaaaaaa aaaaaaaaaa aaataagaaa aaaaaacaat 180  
taagcaataa aaattgccaa acgattgttg aaattggcat ccaaataaac acatagaaaa 240  
gagtgccgaa aaacttaagc agtttagtga acagatacta gacaatcaag tcgaacttga 300

<210> 1602  
<211> 314  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-031-Q1-E1-C11  
  
<400> 1602

ccacgcgtcc gccaacgcgt ccggattttg caagtgtcgc acagcattat gactattcaa 60  
agtcagcaac gatcaaagag tgaatctcaa caagttggac taacttcgat acctaacagt 120  
ttgtcggagt tcattaaaaa gttggatgac tcggaggag aacttttagc cgttgcaata 180  
gacagcagtt caaggctcca agaatggcga acgaggagct tagggaatcg agagaaagat 240  
tcttatcatt ccgggaagag ggttcgagag ttgaaagcg ccgactggaa gcctatggag 300  
aagctttcta gaac 314

<210> 1603  
<211> 380  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-031-Q1-E1-C2



<400> 1603

tcaccagtgg aattcgtgcg atggtggatg tgaagccaca tgacgcagtc gttgcatgtc 60  
aattatgcat caacatttgg cattgcaagc agctatgaaa ttagcatatt ctacgaagaa 120  
ctatctttat gcgctgaaat ttgccaatcg attgttggag ttggcaccca atgaagacat 180  
ggagaatact gccaaaaaag tgaagcagtt ttgtgaacgg aatccatcca atcaattcga 240  
aatagagtat gatattggaca acaataactt gcagttggat gctggtagat tgaaaccttg 300  
cattccaagc aagagttgtg tacattgtgg tgcttgttac gattccagtt ggcaatcgac 360  
gacttgtacg gtatgtcaag 380

<210> 1604

<211> 308

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-C4

<400> 1604

acgcgtccgc acacacgtcc gactcttget actttcttat ccgtttatgc caattggggc 60  
tttataaata ttgaaggagt tggttggggc tgggctgcaa ctgcctgagt atggaatggt 120  
gtttggttcc ttccttgtga ttttgtgaag attggagttc gtaccactat tttgtccatg 180  
cgatacacat aatgctcttc tagattatct aagaagctct ccataacgag gctcttgcgt 240  
cattttcgcg atcatgatga ggaagagtca gaagaatgtg aggatgagga tgaacattat 300  
gaatatgg 308

<210> 1605

<211> 337

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-C6

<400> 1605

aagacgcgtg ggcggacgcg tgggaggacg cgtgggagta gaagaacaac gagaaaggaa 60  
acaactgagt atcaggaaga aaacaggag tagatgagga aagaaagatc aaggaagtaa 120  
gagtaagaga aggagtaatg tgaatgaaag caggaaagta tttgacgaag agagtgtaaa 180

gcgcgtacct tttgcagaat gtcccaccga gtgagcgagg aagcaaaatg agagagccgc 240  
 atctaccag gtaagacccg aagctagttg atcttatgct gtccaagcga agtaaggctg 300  
 aaccattatc tgtgcaaaag gatttggaag agatggc 337

<210> 1606  
 <211> 90  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-031-Q1-E1-D11  
 <400> 1606

ccacgcgtcc ggtaaaaaga cgtcgtttgt gagtccaaaa aaaaaaaaaa aaaaaaaaaa 60  
 aaaaaaata caacaactca aaaaaaaca 90

<210> 1607  
 <211> 376  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-031-Q1-E1-D5  
 <400> 1607

aaaatgatgt ctgcgccctc agattgtagt attattggaa acgcagtaga tcagaaggaa 60  
 ctttcattta cctgcaacca gtattgacga tcgacagatt cacacagtta tggatcgtcg 120  
 taaaaaaca tggcctttga tgcattggaca atcaatcttg tctggaatct atcgggcaaa 180  
 atgacttcaa ggaccctttg ctgacatgat agattttcca tccttggtat gcaaaaattc 240  
 cattcatgtg aaatacagtg ttctagcttt gtcgcttgat ctgagattca ttactaggat 300  
 agcagcctct ttcaatgcct tcttgatgac acatcttcca tgtctatggt gtagaatatc 360  
 tgcgaccctg gttact 376

<210> 1608  
 <211> 437  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-031-Q1-E1-D6  
 <400> 1608

cacacgcgtc cggaacaccg caggtggcag tctcgggtgtg catgtaacga gttgcacacg 60  
 tccttggtca ccttcgtact tgcaagccgt ctttcgtgac tggaaacact tttacgatca 120  
 caaaaagaca actgtacact tacacaggcg tgggtgcttc tcttgtaacc acagtcactc 180  
 tagcaaaca cagcgtttag gaacctttgt agcaaataca tcgtcgtcga aatatatacc 240  
 ccaacgcctg cttatgaacg acaaaggctt attgaatact ttttctagat cccctttgga 300  
 tagactcaac aaccatagga accaggcctc gttagttgaa gagtgtgaaa agtccaacca 360  
 agtgagatac gtcataattct ttcaacgtga accactgtta aaactacaag tggaacaagg 420  
 tcatccagaa ggaaccg 437

<210> 1609  
 <211> 409  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-031-Q1-E1-E10  
 <400> 1609

ttccgggtgc acccacgcgt ccgcacacgc gtccgtggaa aatacagaaa aacgattgca 60  
 gcgttgctcc agtttgtagc tcgttttatg ttcgagaaag cctgctttgt tgatatcgtt 120  
 gttacaaata ttggaacaga attgtgatga gcaagtgatt gatttatgga agacatatat 180  
 acctaaactg tcgagaacac tttcagagga ctctccagaa cttgtagaga tagttgcaa 240  
 tcattctccc aaagtagctt cctttgtatt ggagctgttg gatagtctga tggaaaatgg 300  
 gaaaaagcca agtccgcaag tactggaagc tgctctcaag cattttcagg atgcttctca 360  
 gcctttatgc gatgtgagat atgcaaattc ttttatggag tccttttcc 409

<210> 1610  
 <211> 343  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-031-Q1-E1-E11  
 <400> 1610

tccggggcca cccacgcgtc cgccaacgcg tccggtaatt ttttagcagt cacgtggatt 60  
 ccttacactg taaaaccgca acgaaaagtt ttttgatcaa tacagtacaa tgtagaacia 120

caaaattatc tgacaagcac catttggttca attttgcac tgctgtgagg agaacaactg 180  
gagtttccaa agtaccaata cagtcttttg gatataatctt ctcccttcaa gaatacataa 240  
acaagtagcg aaaaaaacac tatccgcaaa aaaaaacagg ccactcacgt gccacagcgg 300  
ctgccacca acctcacag cccaccttc gttttttttt tgg 343

<210> 1611  
<211> 199  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-E4

<400> 1611

gcggacgcgt ggggttggtt tcttttcac aacgcttcgt tccgttactt tttgtcgtga 60  
caacttataa tataaaatgg ccacaataat ccctgtgtcg tcagcgggtg agctaacttt 120  
aaccagacac atagcgggcg gtaatgagca tggtagcgcg tgttctatcg tagttcacca 180  
gtcgcacatc ccagacact 199

<210> 1612  
<211> 354  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-E5

<400> 1612

aattggtttc gaagcaaac gtttgaggac tatattagt acttgaaact caggggaaag 60  
gaacgtgaac gacaagcaaa accttgtaga acacaacaag tgagtagggt ttttgtaatg 120  
tgtgtaacc tcaacgctgt tagcgagaaa gacgagcaac ttaaaactaa aagagctata 180  
gagcagcaca actcggaagg agctcgcat tttgctcaga atgcaattag aaagatgacg 240  
gaaagaatga actacttaga gtaagctcca agactggacc ctgtcgtggt taagctgcag 300  
tccaccatca tagttcatat cataagcaaa gatattggac acaccgtgc gacg 354

<210> 1613  
<211> 398  
<212> DNA  
<213> Cyanidium caldarium



caaacgcgctc cgcccacgcg tccgttttcc tttggtacga tggatttgac tgggtgcttca 60  
 gctgtttctc aacttggttg agcttcaagt cgtctatatt tagcaagcgc tcctgtagaa 120  
 aagagcaatt caaaagctct tggtttatta tccgcattac catctccttt agacgaagtt 180  
 gctttgttca cctcggcggc tggagtcgtg tttggtttcc cctatttgac tccaaaaggg 240  
 cccgatccaa agaaagacac ttggtaccag agcatcaaaa agcctgtttg gcaaccaccc 300  
 aattggttgt ttccggcagt gtggatccca ctcaaagttt taaaagcgt tagtttggtc 360  
 ttgttatgga agaaagaagg agaatt 386

<210> 1616  
 <211> 433  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-031-Q1-E1-F5  
 <400> 1616

cacacgcgctc cgcaaagcct gaacgattcc aagacggcgc agtaatcttg ttctccacgg 60  
 tagctcgctc cgacagaaaa agacatgttg agctggctac aaaaaaacca cttgctagtt 120  
 gcaatattac aagtgtcaag aatgtttact ctttatcgag tcacagtgcg tcccttcccc 180  
 taatctttct ttttcggtgt cgacgagtgc gtagacatgt cgtcttggtg acgcaaccct 240  
 ctattgacac tctaggtttc ctgtgcagcg tcgaactacc taaaacgcaa agcagcaaag 300  
 tcccaaagtt tcgactcttt ttgtttctcc cactagccat attgaaccaa agtgttttgc 360  
 accacttgcc acgacaacga atggttcact ctctgtgtgt ttctcttgac agaactcgaa 420  
 gactatttat ttc 433

<210> 1617  
 <211> 440  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-031-Q1-E1-F7  
 <400> 1617

catggagaag cttggcaaag cctaagtaga aggaagaaga atagagaaca ggcccaaaga 60  
 agaagaaaga atagtggatg tcatagtatg gcagaagaag aaagctctca agtttttcac 120

gccaaactat tgctaaatca aggctccaaa gattggcttc gttcgttggg aaacttgctg 180  
gaaactttta caacggaaga ggtaaaggta gcaattcggg agttgttcac gtagttcatg 240  
tgtaggatga agaaaagttg agtactatat ctgcgcactt ggaacgcgat gctacagaaa 300  
tatcgaggtc actgcaaaaa tccaaagaag ctgttgagag tatgcaagag tctttacaaa 360  
ggatacaatc ggaaagtgc ttgattgcag cggttttaca aaaagtgcac aaagtaagaa 420  
aagacgtcta gctccaagat 440

<210> 1618  
<211> 383  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-F9

<400> 1618

aacatatcac agagaactac agagacagtt ggaaactaca tttcaggagt ttggaacagt 60  
atttcatata gactttcatt ccatgaagtc taaaggaaat aagatgacac cggatatgga 120  
tggttctcgg aggccggata tggtagttgg gaacttgaga ggaaagagtg cccgtccaga 180  
gtttactgcg gttgttgtgg atactttgca agacttgga tatcgagttt cattgaatga 240  
gccttatgca ggtgcagcta ttctaagaat gtatggaaat cctcgtcaag ggcgtcatag 300  
tattcagatt gaaatcaaca gagagcttta tttggatgaa aaaagagttc gaaagattcc 360  
tggcaagttt gaacgtcttc gcg 383

<210> 1619  
<211> 454  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-G11

<400> 1619

cccacgcgtc cgcccacgcg tccgcggacg cgttggttct ggggtgtctct cttgttttgc 60  
tttttcaaag cttgaagact atttatttcc tactattttt tagaggcttc tccagagatt 120  
ttttgtacta gtcttattcc atgcttcgtg gtgggtgaat ggctcctttg acaacagggt 180  
tgtcaattta ccgccaatct ccacagcttc aactgccaac ttgtacgcgt atatatacat 240

atatttgtag agattcgtgg tgtaaaatga agagtgcatt ggttgaaaag taacagtaga 300  
gtactagtgt gcctgtagag gaagcacttg aaaagcgggc acgtccttgt acttgtctac 360  
aagtattttt ttttgcttgt agagattgca agtttagtgt actagacaag gtttccaagt 420  
atcattcggt gcctttaagc gcgtatgatg cagc 454

<210> 1620  
<211> 207  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-031-Q1-E1-G12  
<400> 1620

cacgcgtccg cagacgcgtg ggcggacgcg tgggacggac cgtgggcgga cgcgtgggcg 60  
gacgcgtggg ccgacgcgtg ggcggacgcg tgggtttgga agttagtact attgcagcct 120  
ttacgtgggt gaactttggt tttcacttta tcgagggcta tttgtctatt ttgacgaaat 180  
atgttggaag gcgcaagcta atccata 207

<210> 1621  
<211> 451  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-031-Q1-E1-G4  
<400> 1621

gggtccacgc acgcgtccgg atgacgatgc tcaccttatt atgtggctag aaaagtatcg 60  
tccaagcacc tttgacgaag ttctgtcaca aaaagatatt atttctacca ttttacgttt 120  
tatcaactcc tataaccttc ctcatatgct cttttatggg cctcctggta ccgggaagac 180  
ttcaactata ttagcttgtg caaaatatat gtatggaaac aacttcaggt ccatggtttt 240  
ggagttgaat gcttcagatg atcggggaat tgatgttgta agaaacgaga tcaaggactt 300  
ttgtagcaca cagaggattt ttgccactgg tgtgaagtta gttatcctag acgaagcaga 360  
tgctatgaca agtgctgctc aaatggccct tcgtcgcatt atggaaaaat atacttccag 420  
cacaagggtc tgtttgattt gtaactacgc t 451



<210> 1622  
 <211> 431  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-G6

<400> 1622

agactagatt ggccggttgca agcctttcaa cgatatagtg tcaagttagc caagagaatg 60  
 ttatcctctc gatcagcgag agaaaatact ttggctccta gaagtaatat tcaaacaata 120  
 ggagttgtag gttgtggtca gatgggatcg ggaatagctc tggttgccgc acagtatgcc 180  
 ggagccaaag tgttgctgta tgacagcaat ccacaagtca gtgccaaagc attggaatat 240  
 ataaatactc aagtggaaaa ggccgttcaa aaaaatcaac ttaataagga acagtcagct 300  
 tccatcgtaac aaagaatagg acctgtcggc aacttggaag cactcaagga ctgcgatttt 360  
 gttgtggaag cagtttccga aaatttagcc ttgacacggg aaattttcac caggttggaa 420  
 caagtaactg c 431

<210> 1623  
 <211> 439  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-G7

<400> 1623

caccacgcg accgaaagac acgctttggt tggcttgact ttattcgagt tcctcgttgt 60  
 cgaagagcag cagtctacgg cattcttatt atgatcgttc aacagttttc aggaatcaat 120  
 tctatcaatt attatatggg aagtttgatg aacgaaactg gattatccgc ccagaatgca 180  
 gtctatacta gtatgattgg tgggtggcaca ggattccttt caactattcc tgcaatatat 240  
 ctgatggacc gactgggacg tcgaccactg ttacttactc tcattggcgg agtcgtggca 300  
 ggtttattta ttgttggtt ttcattcctt gttccaata ttcacaccag ggaaggtatc 360  
 tacatttggg gcgttgatc cgactatctt ttctggagtt ctgctctagg tccaactcct 420  
 tgggtggttg cttcagaaa 439

<210> 1624  
 <211> 372

<212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-031-Q1-E1-H10  
 <400> 1624  
 cacgcgaccg cagatgttta ttggagatgg cgccaagatg gttcgagatg cctttgccct 60  
 tgcaaaagag aaagctccta ctattatatt taticgatgag ttggatgcga taggaaccaa 120  
 aagatttgac tctgaacttt ctggagatcg tgaagttcaa cgaacaatgt tggaactttt 180  
 gaatcagttg gatgggtttt cttccgatga taatattaaa gttatagctg ccacgaatcg 240  
 agtggatata ttagatcccc ccttgatgcg ctcgggtaga attgatagga agattgagtt 300  
 tcctttaccg gatgaaagtt ctcgagctcg tataacttcaa attcattcaa gaaagatgaa 360  
 tgttcatcct gt 372

<210> 1625  
 <211> 255  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-031-Q1-E1-H12  
 <400> 1625  
 ggtccaccac gcgaccgaaa aagcccagaa gccaaagataa ggtatcaaag taaagaaaga 60  
 aggaaaagga gaagaagaga gggtagcgtt agaagcagca aaccagagag gaaagcgta 120  
 aagcatgaaa gaaaagaaat ccgaaaaaga agagaaaaag gtaagaaaga ggaccgaatt 180  
 aaggtaagag gtacangagc aagaagagaa gagagaatgc tgggtggagt agcgaaacaa 240  
 gagaaggga gtaaa 255

<210> 1626  
 <211> 450  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-031-Q1-E1-H4  
 <400> 1626  
 gggtcagca cgcgtccgga gaaatgcgtc ccactccttg aatgtatctc aaagagtcgt 60



<210> 1629  
 <211> 316  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-032-Q1-E1-A3  
 <400> 1629

acgcgtcccc ggacgcatgg gatacgggaa agcagtanaa gaagaaagag aaaggaaaaa 60  
 actgagtatc aggaagaaaa gagggagtag atgaggaaaag aaagatcaag gaagtaagag 120  
 taagagaacg agtaatgtga atgaaagcaa gaaagtatth gaagaagaga gtgtaaagcg 180  
 cgtacctttt gcataatgtc ccagcgagtg aaagaagaag canaaagaaa gaaaaagaag 240  
 tagccaggta agaccgaag ctagttgatc ttatgctgtc caagcgaagt aaggctgaaa 300  
 cagtatctgt ggaaaa 316

<210> 1630  
 <211> 605  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-032-Q1-E1-A5  
 <400> 1630

cacgcgtcgg cgccttaagg gattggagtg gcttattcta tggcttttgc tttgcgtggt 60  
 ctagcgagtc tttcaagtcg tttgagtact tggaaacagg gttacaagat tgtaactgtt 120  
 gcaaataatt ttgaacgaga aagaggactg cgactggtga gttccttcca aagtgcgcgg 180  
 cagtggactt cgttgcaagg tttgttatgt cgctatagaa gtgacagcgt tgtggaggga 240  
 gggaaaaagc aaaagggagt cgctactgaa agaagtccgg tttctacagc cattcccatg 300  
 ggttatgccg atgaatatth ccatcacgtg catcgttggc gtccaggaga tccaagtaaa 360  
 cgaacggtag tctatthtggt gttgggaact gccaaagttta tctactgcttg tattgctcga 420  
 gtaataatcc tatgcttcat atatactatg atgccttctg cagatgtact ggcagaggca 480  
 tccacagaag ttagthttaga cagtattcct gaaggaacaa ctgthttagt gaaatggaaa 540

agaaagccgg tatttataag acatcgtaga gacggagata ttganaaggc aagacatgat 600  
gataa 605

<210> 1631  
<211> 255  
<212> DNA  
<213> Cyanidium caldarium

<223> unsure at all n locations  
<223> Clone ID: LIB190-032-Q1-E1-B1

<400> 1631

ggatcacgta aattaatccg ataaaccgag aaccttacct cctcacaaaa aggtggtgca 60  
cggctgtcca aaagaacttg ctgtgaaagt gagaagaacg tacgagaaaa gccaaagttga 120  
ggaaaagaag gcaagtanaa gggcgggccc agaaaagaaa gggcgtaaga cgtgatacag 180  
agtaggaaga aaagagaaga gagctagaaa ggaggtaaaa gaagagtaaa aggactagaa 240  
gacgtacgga attca 255

<210> 1632  
<211> 351  
<212> DNA  
<213> Cyanidium caldarium

<223> unsure at all n locations  
<223> Clone ID: LIB190-032-Q1-E1-B2

<400> 1632

ccacacgtcc ggcacgcggt ggcaaatttc attcattcta tttatagcca cttttgcaac 60  
ttgacagttt tgtagttcga agataatggc agttaggcaa tgtttgctta ttttcatatg 120  
tctttcagct ctgtaggtt caactttggc tgcttctggt gcaacgtcta tttactcggt 180  
gcttcagagt aaaagagact atacttttac agtccaaagc atagagctgg ctaatctaac 240  
agacgtatac aacagcagtg tattggactt taccttcctt gcttccaatg acactgcttg 300  
gaaacaatcc agagccaatg tcaactggtgc acttagtgca gcanaacaaa a 351

<210> 1633  
<211> 297  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-032-Q1-E1-B3

<400> 1633

accacatgtc gggactggag accgcctggt acagtcgtca tcgatgttgg aatcaattcc 60  
gttccagact cctcgaagaa aagtggatat cgattggttg gtgatgttga ctttgatgat 120  
tgcaaggacg tttgcagcat gattacacgg gttcctggcg gtactggccc aatgactagt 180  
gctatgttgt tgagaaactg ttgtgacggg gccaaagaag catttgggct tgcctagaga 240  
aaaacatccc agatttcgat attaccacca aggtcgggtgc tttaaaagtg tccatgc 297

<210> 1634

<211> 271

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-032-Q1-E1-B4

<400> 1634

tcggcaaaca gcatgtctac tggaagaaca ctagaccgtg gatttgaagg ttagcagtga 60  
atattcaaaa ggtggcaact cttctcaaga aggggggttca tctcctaaat tgggtagcag 120  
tccttcaaaa ctaagcaaaa gtcctcgcgc tcaagaagtt tggagtaaaa cagtgcattc 180  
ttggggggcgt tcttactcag gaaaaaaacg ttatgacacc gtggagaaaag acacanagaa 240  
agaacaagta tatttgagat acatgatctg t 271

<210> 1635

<211> 412

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-032-Q1-E1-B6

<400> 1635

cgggtatgac cacgcgtcgg cgcgacgcgt ggagcggacg acatggggtg agaagtttct 60  
tttccaactt ggtggagaaa caagatggca tgatctggag ttttttctgg aagatgtctg 120  
tactgcactt gcttgtttat tttcttagaa attcagcggc ttgaaagata aagttgaaga 180  
cacttccagt actgttggtg tggaagatgg tgacaacagt cgggtggcaac aagcgttact 240  
tgaaagtttg cgtcatagtt gggaacctcc tagagaatgc gccacacatg atgacgttat 300

tgagattact tctttggaga gactgtacag agtctttgaa agatgctaac tcttttcgca 360  
 tttttttttc gatatccagt atcgtgataa acgtttctta gtcaagaaga tc 412

<210> 1636  
 <211> 125  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-032-Q1-E1-B8  
 <400> 1636

gtcgcctcct tgtgtgtcgt gcaaagagcc gcataaactc tatgactcat actaccgact 60  
 tttactgggc actacgcata gatcaactgt gtcttaccat ctacgttcca acgttgaccc 120  
 atccc 125

<210> 1637  
 <211> 175  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-032-Q1-E1-C1  
 <400> 1637

gcaaaggtta aaacggtttt aaatattcca ttgaaatcag atgacggaaa aaatggcatt 60  
 cttatatcat cattaaaaaa ggctgaagaa aggaacgctt tgatccttcg cgtttatgaa 120  
 ccacttggtc gccactgcac tggcattatt cgactcgctc agcagtaacc tgtgg 175

<210> 1638  
 <211> 276  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-032-Q1-E1-C2  
 <400> 1638

ccacacgtcc gccacgcgt ccgcaagtgg atgaaagata ctgcattttc agaaagagag 60  
 tggcaaattg aaaagacgga tcagttaaag ccaatagctc aagaactggg ttgtagtgtg 120  
 gctcagctgg ccatagcttg gtgtgcagcc aatcctaacg tctccaccgt tatcacagga 180  
 gctactaggt tggaacagct ggaagaaaat ttcaaggcag tgagtattgt tcctaaattg 240

acacccgaag tcatgagcag aattgataaa attgca

276

<210> 1639  
<211> 317  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> unsure at all n locations  
<223> Clone ID: LIB190-032-Q1-E1-C3  
  
<400> 1639

acgcgtccgc cacgcatccg ccacgcgctc gccacgcgtc cggaaaatgt taagttgggt 60  
gggtcgttgg tgggacagtc atgtagtaga aatggcttla gacaatgtta aaaatgagca 120  
gatggaaaga atccgcaaga caattatttc aagggtacca gacgttcta cegtgggtga 180  
aattggagca agtcaagtc tcaatttcct gcactaccct tcttatgtga aggatttgac 240  
agttattact ttacaagaag aactcagcan aagagctcga caanaagcac aacagagaag 300  
tctgaatgtg catcata 317

<210> 1640  
<211> 196  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-032-Q1-E1-C5  
  
<400> 1640

ggcctaagtg atatccttga gaacttactg taggaagacg tcaacgtagc ctacctttgc 60  
atatcataaa ccttggtcgt agagacggag cgtatatatc tggatcaagt cgacgagctt 120  
ctctttctgc tttcgtcttt gccgtcctca tgagcgtgga acgaccgcca gtatagtact 180  
atacggctgg ccgagg 196

<210> 1641  
<211> 249  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-032-Q1-E1-C6  
  
<400> 1641



ggaattccgg gacgaccacg cgtcggggat cattccacgt tggtaaagat agacttgtct 60  
 caaggcagct ttaaagtact ccaagactgt gacaaagatt tagaatgtga tcataatacc 120  
 aagtttcagt tggaacttat tcagtatggc ctcttttcac ctgggttttg gacgagagaa 180  
 aatgttctgc tcttctatct ggagctcgtg tcaggtgtat tcataaggga actctctact 240  
 tttcacaca 249

<210> 1642  
 <211> 596  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-032-Q1-E1-C7

<400> 1642

accacgcgtc cgcaaactgt agaacagaag acttgctaca agacagtagc agttcctaca 60  
 gagtatcaga aatattgtta caagcaagtg gaacaggagc aagttgttca aaagagctgt 120  
 cccacttatt attcagtaca aaaggtgaaa tatcagagct gccctactta tatcacgcag 180  
 ccaactatca tacccaagta ctgcagtatg tcggtctctg aagagtatgt acagcaacag 240  
 caatgtgtaa agtatgtggc tcaacaagtt atcgcaccca aacaatgtgt caagtactat 300  
 accgagcaga agattcaaca aaagtattgc tctcgctatg ttactgaaga agaagtacaa 360  
 agcaagcagt gcatcaagta tgtatctctt cagaagatca agtacgagtc ttgctctgct 420  
 caatatgaag ttcaaaagat caagcagcaa caatgtacta tgacagtctc tgaacaatac 480  
 atacagcccg atacttgcta caggtatgtc nctgaacaac atttggtgcc tcatacttgt 540  
 tacaggtatt attctgtacc caagtttatt gaaaagtgtc atcctcagta tgcaac 596

<210> 1643  
 <211> 247  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-032-Q1-E1-D3

<400> 1643

cgtcggccca cgcgtccgag canatactga gaactggaag aacgtttgtc agatggagtc 60

caattggtat ccttggtact aacgctgtgt gtncccagta atagctgctc ttttatggga 120  
gcttactttg agaatttaac tttttgtcaa gaaagaattc atacactttg ttgtagtctg 180  
gaatggactg aagcgtgttg tgttattgtt tgtaacaagt acaagaataa tacgtactct 240  
tatttct 247

<210> 1644  
<211> 363  
<212> DNA  
<213> Cyanidium caldarium  
<223> unsure at all n locations  
<223> Clone ID: LIB190-032-Q1-E1-D4  
<400> 1644

cggcagaaat ggcgacctct tatggtgttg tcgactcctt gaacacgagg aaaaaaatgc 60  
tccttgtccg gaaccagaga aagaagaaga aactgccaaa gtaaaaacaa cgaatgaaga 120  
tgaaagtgat gacatcgctt gtgcaacctg ttttgagttg ttggtgcctg nggatgggggt 180  
tcttgaactg ccgtgttcgc atctatttca tagtgactgt atcgtacagt ggctactana 240  
ccaccaacac tgteccattt gtcgtacttt gctgccacct tttgactttc acggtcagtt 300  
tgttttcttct cancaaaacg gacacttgat acaagtggga gaaaacggta ctcaagaacg 360  
tcc 363

<210> 1645  
<211> 522  
<212> DNA  
<213> Cyanidium caldarium  
<223> unsure at all n locations  
<223> Clone ID: LIB190-032-Q1-E1-D5  
<400> 1645

cgggatcacc acgcgtcggc ggacgcgtgg gcggacgcag tggggtcagt gtaaagtttg 60  
tcgacacaaa agtagctttg tacgatatgc tggaaatttg tcgaaagcaa agtgtacagc 120  
agcggtgcaa gagcctttgt cgtttgaacc tagctcagta aattctcatg ttggtataaa 180  
ggaggaactt gcgataggtt tagaactacc ttgtggtgca aaaagggttg aggatgcacc 240  
ttgtggagat ggtgccaaact gtccttttgt aagatatcaa tgtaaaaggt acttggccgt 300

tataccaacc tgtgtttcca actaacgtgt gacattgcat tagaggatcat attataaaag 360  
 ctataaaagg aagtcctgtn tgtaaagctt gtcctttatg taaatatgac gctgaagctg 420  
 aactttgtcc ggaacttcgt cgatgggtcaa ggaaacgttt atctgtagaa acgatgcaga 480  
 gaatagcttc ccgaacgggg tggtacctgt ctatcaacct tt 522

<210> 1646  
 <211> 451  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-032-Q1-E1-D6  
 <400> 1646

cgggatcacc acgcgtcggg ctttgttgtg ctgagcgaga ggcaagggtgt tatcatggca 60  
 aaggcagtga gaattggtgc tgaaggttac aggttaaagt tggacgggtgc agttcaagag 120  
 atagacggtc gttctgtagt tctggtagat gtggatagta ttaccctct catgtttgga 180  
 ggtagtatga aagaaaacgc caaattgttg gatgccaagt ttctaacgaa gtattatgat 240  
 gagaacaatg acttcttctt cttgtcgact agagaagaga agacaatgtc tgtgacgttg 300  
 caacttgcca gcgaatatgc agagctggta gatgaccaat tcgtgaacgg cttcttcgag 360  
 aatgctctgg agtccgctca gaagacgtct taatttgtca agtagagtgt actgtgcgta 420  
 attctgtgtg tagttgtctc tgtgtgtgtg t 451

<210> 1647  
 <211> 384  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-032-Q1-E1-D7  
 <400> 1647

cgggatcgac cacgcgtcgg actagaaaga gtgaggagtg gaaaaaactt ggtttccagg 60  
 gattggatcc ttgtacagac tttagaggag gtgggttact ggcattgcag caacttgtat 120  
 attttgcaga aacgagaaga gagttggctt taaaaatgtt gaaagaagcg agtgacagtt 180  
 atccttttgc ttgtgttggg attcattgta ccgcagctat tgtgcaactt gtccatgaag 240  
 actatttggga tatgttgttg tatgcgtgtt ccgaagaaca agccttcaaa gtcattccag 300

aaagatatattg tgaactgtgg ataggttttc atcgcagttg gaagaatcag acctgggaag 360  
atagcatgtc gtttcaaadc tgtg 384

<210> 1648  
<211> 234  
<212> DNA  
<213> Cyanidium caldarium

<223> unsure at all n locations  
<223> Clone ID: LIB190-032-Q1-E1-D8

<400> 1648

ggaattccgg gatcaccacg cgtcggcttg attccaattg gcaaggcgaa gatcatgcgt 60  
gaaggaaaac accttacaat ggtttcattt tctaaattag ttggcttttg tttgcaagtt 120  
gcagataaat tagcatcaga gggatatagaa tgtgaagtca tcaatcttcg ttcgattcga 180  
cctatggata ngggaactat catccgttca gtgaaaaaga tcatcgtctt gtac 234

<210> 1649  
<211> 217  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-032-Q1-E1-E1

<400> 1649

taacctaaat tggatggaac caatccaaaa ttggccaata ataaccttat taattccccc 60  
ttttggttgg ttaaccgttg gccaaatttg ggtggtttcc tgggaacaat tggatcaatcc 120  
acaaccacca attgcaaaag gaaggaagga agaactctcc aagaaagaaa cccacagtta 180  
aacttgaaca accaaatgca acaaaaaaca cagaaaa 217

<210> 1650  
<211> 367  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-032-Q1-E1-E3

<400> 1650

tcactacgag gtttagtttt cagttgtggt gaagactttg ttttagcgact tgtgtgcaaa 60  
aaatggtaaa cttgttgtat actgatgagg gacgaaacct gttaaaacgt taccaactca 120

ttttatatgt tgctatgttg gctttctctg ccactatttt ggggcttatg gggaatccca 180  
 tgtttaatct ctatctaatt gccaatgaat atatacaccc ggatcctagc gaaccttttg 240  
 taccattga cacagtgaag aacgtcactt tctacaagtc tctctccttc tgtgcctggg 300  
 gtgtcacacg agatcgtaca cgtggcatgc attccacttg ccgatgggtc attgccctag 360  
 cttctgt 367

<210> 1651  
 <211> 150  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-032-Q1-E1-E5  
 <400> 1651

cgcgtcggcc acgcgtcagc tcacgcatcc gccacgcgt ccgatttata gataaaatga 60  
 gtaatcagat cgcgtctatg aatgagcgtt tcagtcaact ttcgagtttg tcggaatgca 120  
 taggaccctt ggtcccaacg aacgttcacg 150

<210> 1652  
 <211> 309  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-032-Q1-E1-E6  
 <400> 1652

attgggtggt gggcgacagt agaggaacgg tttccacgta tactttagg aaccaggact 60  
 gtagtaactg gcttgagcaa ggtgtttggt caagtatagt tattgtagtt gtagaggggt 120  
 gttgaaataa aggggacgag ttgtgagact taaattccta tctaccgtaa ccgagggacg 180  
 aaggtgtctt tctgacagtg gacttcagtg gccgcagtgt ctcaagtttt cgggttggtt 240  
 ccgtccaagt aaccgcactg ctgtacaac ggcaattcct ctcacctgtc accgccacgt 300  
 ccaaaccct 309

<210> 1653  
 <211> 371  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-032-Q1-E1-F1

<400> 1653

cgggcttggt tgtggaattg gaatcattca acttcgtggt ggtgggtggtg cctttggtgg 60  
tccttggtggt aaacctaacc cactaataac taaaatggtt cagccaataa ttgggaaaat 120  
ccacctccaa atttatggaa aaggaattct caattgtcaa tccggtttgg caaattcggg 180  
cctaatagaa aattacggtt aaaccattgg taaaaaattt tccggcaaca aaccaattc 240  
cattgaatcc aaaaatttca attaaaaaaa ccaaccagaa ttgcaaaacc tcctttccgg 300  
taaaaaagtt cccgtaataa tcctccttcg aaaaactttg gcaaacatta aaataatttc 360  
aaactttggt t 371

<210> 1654

<211> 174

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-032-Q1-E1-F3

<400> 1654

ccacacgtcg gccacgcgt ccgggagaga gagagagaca gacagatggc caacgctggt 60  
caagatggcc ttgtgcaagt caacanacat agaaaagtaa agagattgca agaagataat 120  
attttgaata gagcatacac aaccagagag tattctgtct ttgaaatcat tgtg 174

<210> 1655

<211> 628

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-032-Q1-E1-F6

<400> 1655

ggaattccgg aatcaccacg cgtcggccca cgcgctccggg atggagtatc cagacaagtt 60  
gctgcctttt gtgcagggtg tgaaaaagtc ttatctccta cgagttggtt acaattttta 120  
ccggaagagt ttgagtctct gttgtgtggt cctaattttg aaagatggga gatgagtagt 180  
ttgattgctg ctaccaaagc cgatcatgga tacactcatg aaagtctctg tgttcaatat 240

ttgtttcaag ttctctcgac ttataatttg gaagagcaac gaatgtttct cacgtttgtg 300  
 acggggcactc cacgactccc tgttgaggagg ttggcagcgt tgaatcctcg tttgactatt 360  
 gtaaagcgga caccggaagc aggtcgaagt ccggatgagt gtctacctac tgtgatgact 420  
 tgtaccaatt acttgaaact tccgcaatac tcttcttatg aaattaccaa ggaacgattg 480  
 gaatatgcta ttcgagaggg tcaaggaagt tttcatttat cttgatgggtg aatacttgta 540  
 ggtcccattg gtanagactt tacatgcaat atatatatat atatacgtac atatatatat 600  
 aatgggtgtg tgtgtgtgtg tgacacac 628

<210> 1656  
 <211> 475  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-032-Q1-E1-F8  
 <400> 1656

acgcgtccgc ccacgcgtca gggggcaagg tgtgtttgtg tgattggttg gtagaaaggc 60  
 gcctattttc aaagagtcca acctagttag aaaacatgaa tccggaatat gactaccttt 120  
 tcaagttggt gctgataggc gactctggag tgggaaagtc ttgcctcttg ttgcgttttg 180  
 ccgacgacac ttacaacgag agttatatat cgacgattgg agtagacttt aaaattcgca 240  
 cgatagaact ggatggaaag accgtcaagc ttcaaatatg ggataccgct ggacaagaac 300  
 gtttccgcac taccacttct tcatactatc gaagtgcaca cggcatcatt aatgtgtatg 360  
 acgttactga gcaggaatcg ttcaacaatg tcaagaactg gttgcacgaa attgatagat 420  
 atgcgaatga gagtgtgaac aaacttttgg ttggcaacaa gaatgacttg acgac 475

<210> 1657  
 <211> 167  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-032-Q1-E1-G1  
 <400> 1657

atgggtttggg tggccgcttt ggccgtcaag aaaaggactt ggtataacca atattaacca 60  
 aatggcaaa aattaaaatt catacaaaca acaacaaatc caataaaccc aataaaaccg 120

gtatcaagca acttcaaaag aaccggttcc aaggaaaaaa ggggttg

167

<210> 1658  
<211> 373  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> unsure at all n locations  
<223> Clone ID: LIB190-032-Q1-E1-G3  
  
<400> 1658

ggaatcaccg ccgatggaac agatgtgttt gttcctttca agattttatt acctcttgtc 60  
aaaccaaagg atatcgtttt aagcgggttg gatatctccg gctataaact ggcaaaaact 120  
atggattcag cgcaaactct ggaaccagat ttgaagaaaa acttagacca tatctagcag 180  
atatgaaacc gttccttgga atatttgatg aacagtttat cgcaaagaat cagttgcctc 240  
gtgcggataa cgtcatanaa acaagtgaca aagcacagca ngtttgaaat tatcgacaag 300  
acattcgana gtaagcaac aacatcagtt ggactttggt gttgtagttt ggactgcaaa 360  
ctctgaacgc tac 373

<210> 1659  
<211> 228  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-032-Q1-E1-G4  
  
<400> 1659

ccaacgtcgt cgagcctggg cctacgattg cctgccttct ccacatcgtg gttgtccttg 60  
aaacacgttt agacagattc aaatggctgc agtaactttt acgagacaga atactgatgt 120  
accgggtatc tcatacggag aaaatgctcc caacaacttt ggagttattg ttgtccacga 180  
gtggtggggg ttgaacgaac tgatcaaaat acgagcacia gagctgag 228

<210> 1660  
<211> 120  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-032-Q1-E1-G6



<400> 1660

catacatatt ttgtgggttc gataagtggg tgtctaggtc gacatgtatg atcaaccgta 60  
gcgctatctg aagccttttg atctgcctac attattgggg gataaatgag tgttacacgg 120

<210> 1661

<211> 121

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-032-Q1-E1-G7

<400> 1661

cgcggtggaac agggagagga tcaggatctc acttatggaa gacgctaagc acgttatatc 60  
caactgtgaa ctacaaagac tagcagatga tgtacaactt gacgatcaag ttgtacaggt 120  
a 121

<210> 1662

<211> 247

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-032-Q1-E1-G8

<400> 1662

aaatagagga aagcaatana agaagaaaga gaaaggaaaa aactgagtat caggaagaaa 60  
agagggagta gatgaggaaa gaaagatcaa ggaagtaaga gtaagagaag gagtaatgtg 120  
aatgaaagca ggaaagtatt tgaagaagag agtgtaaagc gcgtaccttt tgcaaaatgt 180  
cccagcgagt gaaagaggaa gcacaacgac aagaaagact agcaggttaag accgaactag 240  
tgatcta 247

<210> 1663

<211> 347

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-032-Q1-E1-H3

<400> 1663

gagcagaatg agcataccac tcgagaattg gagttatctt catcaagggt agctatattg 60

aaaaacaagt taaagttggt acagcgaagt tgggaagtag atttcagtga gattaacaaa 120  
 ttagaaaaga ttggattcgg tgcctattca gaactattta aagcagaatg gaaaaggacc 180  
 attgtagctg ttaagttgat gaaagctcaa gaaacttccg gaaaagtcct gcgtcagttt 240  
 cactaacaag tgaatacact ttccaagttg acacatccga ataatggttt aattaagggc 300  
 ccctggtgaa agccaacaaa tgtctcaata ataacggaat ttggttt 347

<210> 1664  
 <211> 289  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-032-Q1-E1-H6

<400> 1664  
 gagttgcaca aaagttaagc ttttcgcata taagtttggg agaacagttt cgattagaaa 60  
 gtaagcataa tagttggctt cgttctatcc ttgaagaagg aaaattgcta cctgatgact 120  
 ttgtgctgaa gcggtatta agtatgattg aaagttcgtc ttccaactat cgaggtttta 180  
 atctcgatgg ctttccaaga aactcgnac aggctgtatc gttgaacaat ttgtatgaag 240  
 tggatgctgt ttatcgtctt accttgcgtg aagacatttt aattcaaaa 289

<210> 1665  
 <211> 137  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-032-Q1-E1-H8

<400> 1665  
 cattcaacga taccttcaac tccaagtgat ttacatcgta aacacccata tactcatgga 60  
 atacgcttgg tatctcgcac aaggatcaca ctgacactca agtgcacgtc acgtcgtgcg 120  
 acgaccgatc cgatgac 137

<210> 1666  
 <211> 432  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
<223> Clone ID: LIB190-033-Q1-E1-A1

<400> 1666

ggaattccgg gacgaccacg cgtcggacag cttatgagaa tgccaaggct ttggcacttg 60  
ctggtgaatt ggagtcttct ggagttgtgg ttcanagcat aactcctttc ttcattacga 120  
gtgaaatgag caagatacgc aaatccagtt tggcagttcc ttcagctgag cgatttgctc 180  
gagatagttt aaagagtgtt ggatatgaag tgtcttgcaa tccttattgg tttcatgaat 240  
tccttgcaact agttatttcc tatttacctt tgaaactaca gattcgctat gtagccaagt 300  
tacatcgtgg ccttcgtgaa aaaggattgc gaaagatgct ttctgcagaa aagaagagta 360  
aaatatgatg tggngaataa tccttgagaa aattttgtct atatatataa atttaccctt 420  
ttttttgtat tc 432

<210> 1667

<211> 245

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-033-Q1-E1-A2

<400> 1667

ccaagcgtcg gtcttcattc accggctgta acgagcatcg aatttttgaa aaagaaaatg 60  
gaaggcttca aaaagtctgg tattcctttg gaacgcttat ggattaatcc agactgtgga 120  
ttgaaaacga gacaatggga agaagttatt ccttccttga gaaatatggt ggatgttgct 180  
gtgcaattgc gcaattctgc aaagaatgga atataaactt caataaactg ttgttgttgt 240  
tgtgg 245

<210> 1668

<211> 375

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-033-Q1-E1-A3

<400> 1668

ccgatcgagt tcgatcgctc tcatgtcgaa tgtttcgaaa tcaatacgat accgatgtta 60

ctacttttag tcctcaagga agacttcaca agatagaata tgcccaagaa gcagtaaaac 120  
 agggaagtgc agtagtagga gtacgacaca agaactatgc tgtgttggct actctgaaaa 180  
 gaaccacttc agaccttgct tccactcaaa agaaactatt tcgcatagac gatcacatan 240  
 ggatggctat tgctggttta acagcagacg ctagattgct ctctaaatat atgagaaccg 300  
 aatgcctcaa ttataaatat gtatatgagt gtcctatgcc tctttcccg ntgggtgcttc 360  
 gtgtcgcgga taaac 375

<210> 1669  
 <211> 408  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-033-Q1-E1-A4  
 <400> 1669

gaccacgct cgcgccacgc gtccgcncac gcatccgcca cacgcgtccg ctcacgtcgc 60  
 cagtcaccaa ttctccaaaa ttgcgaaaag cataaatata aaagatgacc aagtgccttg 120  
 ttgatgacta aaattagttg ggtaagcaag gcaatgaagt agtcaaattt acaaagtatt 180  
 cttagatctt agaatattgt gtaaagtcgt ttttactgaa aagctcacia ccaatttttc 240  
 ctcaaatttg actctaagtc gatacctaatt gtatagaatt ccgagagtaa tggaaattta 300  
 aacaattgcg atggataaag tcagatgtta cgtaattctga gagagagaga gagaatgaat 360  
 acaaggcaaa agaatatcag catttaactg tgtccaagta caagctat 408

<210> 1670  
 <211> 448  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-033-Q1-E1-A5  
 <400> 1670

aaacctttcc tttgttattg gagcctactc aagtagaaac tatagaaaca gaatataaca 60  
 aggaatttat cttgcgcatg attcctagac tagattggaa cctgggtcga caagtaagta 120  
 aacagtttgc gtttggtgaa ctgccaccag tagctcccca caacgacaca acggatgaag 180  
 aaactttacg attgcttcac aagttgctat tggagacgca tatcaaggaa ggagttctca 240

agagtcaaga tggaactatt tatccgataa aagatggcat tccaaatatg ctcataacac 300  
aagtcaacca tgacgagtaa agaaaaatag atatttggtt attttcaaaa aaaacttttt 360  
tgggtggagtt tatgctgata ttgatcccaa aagcaatttc atcttttgat acacttctcg 420  
atgaatttcc tgggtgcgcg attcttgg 448

<210> 1671  
<211> 432  
<212> DNA  
<213> Cyanidium caldarium  
<223> unsure at all n locations  
<223> Clone ID: LIB190-033-Q1-E1-A8  
<400> 1671

ccacgcgtcg cgccgaatac aagattagtt gatagttatt tagggttggt gaacactgct 60  
tctgcaggtt tattcggtta tgataaagaa caagcgagaa cgggaggttg gagagtctct 120  
gaaaaggttc tttgttccac tgccttggtt ggtggttggg tgggaggttt tgtggctatg 180  
aaaaagtttc accataagac aaagaaacag agctttcttc aaaagtatta tgcctgtggt 240  
gcagcaaagtg tangaatgat aggattgggt gcagcaacaa caaagcttcg tggacacttg 300  
caacgtcttt tgcgtagatg aatgtgagag agagagaaga tgtatgcttt tcgttcaaag 360  
aatagtgtat cttgatcttt ttattcgaca agtcattata canaatcaac aacaaagcgc 420  
ttctttcggt tc 432

<210> 1672  
<211> 400  
<212> DNA  
<213> Cyanidium caldarium  
<223> unsure at all n locations  
<223> Clone ID: LIB190-033-Q1-E1-A9  
<400> 1672

tacggtcggg tatccgggtc caccacgcgt ccgcacacgc gtccgcgcag cgtttgcaat 60  
ttttgttggt tgtgagtagt gtcattggcag agcaacaaag aagtgagagt actgaagtta 120  
gaagtgtgc agttcccacc cttgtataa aggggttggt gttttatggt acctcttcca 180  
ctcttgacat gtgctccaag tgttatagag aacatttgcg ccaagaggaa caaagacttc 240

aagtggagtc tgtatgtcag cagcaacaac aacaacaaca acaaaagcag gataaggaac 300  
aagaaatgac tcaggggtcc gagttgcacg acttgccctc taaaaaggag caaggggaag 360  
agacgtcngt ggaagtggct caacctagcc agggttttgt 400

<210> 1673  
<211> 232  
<212> DNA  
<213> Cyanidium caldarium  
<223> unsure at all n locations  
<223> Clone ID: LIB190-033-Q1-E1-B1  
<400> 1673

gtcggactga actcttttan aggatatgat tgttcatgtc acacgggagc tatattttgg 60  
gccactctan gcttggattg tgctatatcg ttgttttcta ttttatgtgc agttgcattg 120  
tanatggata cggatataaa tataaatatg catatacaca tattgatata taagagtgta 180  
tttatgtgtg tgtgtgtgtg tagtcttgca aataaatagt attcttgtgg tg 232

<210> 1674  
<211> 405  
<212> DNA  
<213> Cyanidium caldarium  
<223> unsure at all n locations  
<223> Clone ID: LIB190-033-Q1-E1-B11  
<400> 1674

cagacgcgtg ggtgaaagga gggtcgacga gctcagcttg aagaacaaag aacttgcggtg 60  
gggttggacg ttatttatga acttggactc tattgacaca ggaattaatg ctctttttga 120  
cccgtttgca gacgcctcac gtggagagga cgcagcagta accaaaaata tagtgcata 180  
tcgcttgcaa caaagaaacg gccgcaagtg cttgacgacg attcaagggc ttgacacaaa 240  
attggatttg aataaaatta caaaggcctt caaaaaggag ttttgttgca acggttgtgt 300  
cgtagacgac gcagaactgg gaagagtcac ccaactgcaa ggagaccaga gggataaagt 360  
caaaaagttt ctagttcagg agaaatttnc tgaaaaagac ctgat 405

<210> 1675  
<211> 396

<212> DNA  
 <213> Cyanidium caldarium  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-033-Q1-E1-B2  
  
 <400> 1675  
  
 ccgggtacac caagcgcccg cgcgacgcgt gggcggacgc atgggcacac acacatagag 60  
 agagaatggc attgtccaca gtatctcaat ggctagtatt aggatataca cttttattaa 120  
 tgttgggagg acttgtanga tatgtcaaag cgggtagtgt tccttccctc gttgccagtt 180  
 tacttagcgg ttttatttta ctttatggag tatatttata caactggaag atttgtttcc 240  
 taacgctcat cctgttgtgt gcggttttcc tatggcgatg gtcaaaaaca ggcaaaataa 300  
 tgccctgtgt accattagcg tgtttgacag ctgtaacttg tttccttttg tggttggttg 360  
 agaataataa agctacttga ggtttttcna aganaa 396

<210> 1676  
 <211> 440  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-033-Q1-E1-B3  
  
 <400> 1676  
  
 gtcggcacac acacatatat atatatatat atagatggat agatagatgg atagagagag 60  
 actaacttgt gtatatagac aggagcaatt atcaacggcc aacgtgtgga tgcaactctt 120  
 cctaccatca aatatatatt agaaaaagga gcacaaagca tcgtacttct tttccatttg 180  
 ggtcgaccag aaggaaaagt ggacaaaaag tattcgtaa aaccgtagc ggaatattta 240  
 caacagcggc tgggtcgacc ggctgtcttt ctggaagact gtgtggggcc tcaagtagag 300  
 caagcttgta aagaaccggc gcctggatct atctttctat gtgaaaactt acgtgtccat 360  
 gtataagaag aaggaaaagg agtagatgan gaaagaaaga tcaacgaagt aagagtaata 420  
 gaaagagtaa tgtgaatgaa 440

<210> 1677  
 <211> 545  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
<223> Clone ID: LIB190-033-Q1-E1-B5

<400> 1677

cgcgctcgcc cacgcgtcag cccacgcagt ccgagcggat tcaaatttgg gatctctttc 60  
agttttattcg gacccaatga attatttttg aaaaaatcgg aagtttcgag ttccagaccc 120  
aatcctgagt ccatcttttg agtctcagat taaacgcagg cctcaaaaga aaaaacagta 180  
ttcacgtgcg tctcncgcga agttttgtca cttttgtgct cgtgctgcca gtaagaatat 240  
cagaatggtg gtttgttcga atatacgaat tggcatgtgt ctcaaagtta cctgtgaaaa 300  
gtgctttcgg cagaacagtt ggaattttga agaagccttt gaaaatccag actcgtggat 360  
atgcactcat tgcgtgggtt cgtgtcctta tctgtcacia tgttctcatc tatcaacgta 420  
ctaatacatc aagacgagtt agccgttttc tcatgaaaaa gcagaaagaa ttgaacgatg 480  
agtacgttga gacaagaagc tgacgataaa agacgacatt gtttagaatt cagttttgaa 540  
ggtta 545

<210> 1678  
<211> 250  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-033-Q1-E1-C1

<400> 1678

actcgcacgc tcgccacgca cgaatgggct aacataagat caagacaata aaacttgaag 60  
ctcatataag aaacattaca tgcattctac cacaacacat atgtaatgat aacacataga 120  
cgaaacaaaa tctacaatag ttagagaaaa tctaataaga ggggtaaaat aaacatcata 180  
gatagaacac tataagaaaa ctaacatttg cggaataac agaaataata gcacaagata 240  
aaataataca 250

<210> 1679  
<211> 243  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-033-Q1-E1-C12



<400> 1679

ctgctcacgc gtccgctcat gcgtcagctc aagcatccgc tcacgcttca gctcacgcgt 60  
cgggcgacgc gtgggtcact tcacaacttt tattgataca cacctcgagg ggcatgtata 120  
tttcaactct gcataattca cgggccttaa tgacttctcg tctcaaccgc aatccacttc 180  
ggctcaccta gcttctccac tttccatcac ataacgcttt catcaacttt tacgacaact 240  
cat 243

<210> 1680

<211> 431

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-033-Q1-E1-C2

<400> 1680

acagacagat ggccaacgct ggtcaagatg gccttgtgca agtcaacaaa catagaaaag 60  
taaagagatt gcaagaagat aatattttga atagagcact atcacaacca ggagatgtat 120  
ttctgtgctt ttgcaacatc cagttgttgg tgaatgcaga aagagctatt ataggaaata 180  
ttacttgtcc agaaagtatc gaattgtgtc gtctattagc tggacatata gcagtttgg 240  
tcgatgaaca tttggatgac tttcgtttgg aagctatctt gggagcacta ttgtgtactt 300  
gttattgtga gtggaagcgt tttgaaggag aaatgggggt acaagaatgg aatgaattgg 360  
agaagatatc ttccttagat acttgggaagc ttgtgcttgg tacaagacaa agagtggata 420  
atatgttaca g 431

<210> 1681

<211> 89

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-033-Q1-E1-C7

<400> 1681

gagtcgtgat atcgagagag gataggggag tacatagatg aggagtgtcc gaaggagata 60  
caccaggaat ggagaagatg ggagaggac 89

<210> 1682

<211> 381  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-033-Q1-E1-C8

<400> 1682

gtcgggtcttc attgaaaata tggaaacgac gggctttgtt tcatcgtatc aaggtgttgc 60  
gttacgaccg gcttggagga agcagactat ccgaaaccag caaacatata ccatattgtt 120  
cagaaaccac gcaaagtctt cgaaagttag gttatcgata gcccttttca tgcagcaaac 180  
ttccaaggat gacgcggaag ccgagaaaca atcgagtcaa cagggctcca aaatgtcacc 240  
aactactagg attgcaggty atatcttttt ctttactatt actacggcac tttttgcagt 300  
cactctggcg gctactttgt atcgctccta gtttctgcag ggtttactcc cgccttttcc 360  
atagaccaag ttgtcggat c 381

<210> 1683  
<211> 406  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-033-Q1-E1-D1

<400> 1683

tccgggtaca ccaagcgtcg gcccacgcgt ccggagcggg ttgaggatat acgtaattct 60  
ctgatattag ctctgtttgt aaagtttcca tctggcagat atcggaaccg ttcttaccag 120  
ttggacattg tggatagccc agtagaagca cttgctgaga agtggaacga acagttggaa 180  
aaagaacaag atgaaactac tgggttgatt agcaccagat tgtcgtcgag ttggcgcttg 240  
gcactagtgt tatatgtggc acagacagtg ggaagttgta tgtacagaga cttggacgcc 300  
gttttacaga aaatacttgg catatcgggtg gagagtgatt cttcaacgtt tctctctcgt 360  
ggcggaccgc gtgactcgga gttttacttg taaagtgttt cttttt 406

<210> 1684  
<211> 396  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-033-Q1-E1-D11

<400> 1684

ggattcaagt gcagctggta taaaaggtaa agtttgaaag ttatagagtc ttgacagttt 60  
gtgttaggat tatctcgta gctttccaac ttgcctcgta ttatttctct tcccagtcgt 120  
cacaaaagga agaattattca gccaaagcat agcgtcacia cagctagtgc aaaacgggtg 180  
gctgtcttgg aaggtgatgg aatcggtcct gaaataatgt cagtgcacttt agacgtgttg 240  
gaagaagtaa cgaggctttt caagtttccc ttaaagtttg aaaaggctcc ttttgagggt 300  
gctgctatag ataaaactgg tgatccgttt ccaatagaga ctcaaaactt atgtttatca 360  
agtgatgctg tgttattggc ttgtaatggg ggctat 396

<210> 1685

<211> 313

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-033-Q1-E1-D3

<400> 1685

tgtcattgaa agcaccgttc acgttttagtc tatcacctgt gcatgtcata agacaacaac 60  
aactgtacia tctgatactt gaatatgcac gaagaaaagg aatacacaga tttgttgaga 120  
tgaatggcaa atgggtggata tattctacga cacctcccac tcgaaaggca ctgcgggtatt 180  
ggatatgacat ggactgcgtg ctgtttaccc cagtcaatga cttacaaacc gccaaagctt 240  
atgcgagaag agtagggcaa gcattggaca ccacacctac ggtcgaattg cctacaccag 300  
atatttgtgt acg 313

<210> 1686

<211> 331

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-033-Q1-E1-D4

<400> 1686

gtcggccac gcgtccgggc cttaaggat ttccggaaaa ggcgtcttg tattttgtgg 60  
tggaagaaga gagagagcgt ggccaagaca agtatgggaa ggaagaaaaa ggcgccacag 120  
acagatattg tcgatcgaat attttgctgg tattgtgaca gagactttca cgaggagaaa 180

attctcgcta gtcacaaaa agaagagcac gtcaagtgtc agtgggtgtaa caagccgctc 240  
 atgtccgtaa acggacttgt ggtacatgct caacaagtac acaacgacga agtgacgcgt 300  
 gttctcaacg cactagaacg catggactct a 331

<210> 1687  
 <211> 257  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-033-Q1-E1-D6  
 <400> 1687

aaataaaatt tgaaagaagt aggagtgtag gggatattat aaagtaatga aaaagataag 60  
 aatataaata taaaagtaaa tgtttataag agaagataaa tatagaagat gtangtaagt 120  
 agaaggaagt atagagatgt agagagaaaag aataaaaaga agagtttattc agcaaaatac 180  
 cataatcaaa tacacacata gaacaacgta taagagttaa atgaaacata acacaagatt 240  
 agaatgtaat acaacat 257

<210> 1688  
 <211> 323  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-033-Q1-E1-D7  
 <400> 1688

caacagcatc actacacgtt ggttgtcact tggtgggtgg ttatgtaatg gtagccatgg 60  
 gcaaccaccg tggagaagac ttatcacgt tgggggaacc agtgcacgt ttgagcgtgt 120  
 cctcgatttc taacgggcgt caggtatgtg ccaactgcacg tccctttgat aatgcgagtc 180  
 tggagattca gtacacgcaa cttgccata acaacgtacc tgtcaagctc tgctcatccg 240  
 tggtgtgata accttcacat tcctcgata caaggccctt gacacagtgc tccggaatat 300  
 cgacgagacc cagatacttc tcg 323

<210> 1689  
 <211> 367  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-033-Q1-E1-D8

<400> 1689

atcaactgat ggagtggaga ggggtcaaagt ttatagtcgt ccaaaagttg cagttttttc 60  
cactggaaac gaacttgtag atattggaag tgtacctgct tttggagaga tatatgatgc 120  
caacagacct cttctcctag cagcgcttcg tgggttgaat atcgatgtac tagatttggg 180  
tagtgtgggg gactcagaag ctcatattat gaagactttt gaaaacgctc tggaagtggc 240  
ggacatcggt gtcactattg gaggcgtttc catgggatgt cagcactata tacagatatt 300  
attacaacga ctggctaaag tacactttgg tcgagtcaga ctcaccccg gaaagccggt 360  
aacttct 367

<210> 1690

<211> 382

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-033-Q1-E1-E1

<400> 1690

ccgggactga ccacgcgtcc gcccacgcgt ccgggagaag atatttggtc gcattcgctt 60  
tgtttaggaa caaaggaata cctagagaca gacacaaaac tattacctac aggcagaatt 120  
ctgcaagccg agtctaaatc gtatttggac ttaccgaag aaaggctcct aaagggacct 180  
cctaaagaag agtctggaat aagaaatggc tatgatcact tttttgtgtt cgataagact 240  
ggaccgaaat cgtcattaga atggatgagt acagttcgtc atgcggagtc taaaagaact 300  
ttgaaactct atagcgatca acctggtgta caattttata ccggcacgtt tcttcaagcc 360  
tcaactatgt gtcgctatca tc 382

<210> 1691

<211> 183

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-033-Q1-E1-E2

<400> 1691

attgaaaatt aacctactga agcacataaa gacaaaaaaa atacataacc acatattacg 60

cacatagaca tcgtaaatga aagaaggaag acacataacg accaacaat ctaagaaaga 120  
 gaaagaacaa gaaacaagtg acaagaaaca acaatagaaa taaaaaaaaa aaaaagcgcc 180  
 caa 183

<210> 1692  
 <211> 308  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-033-Q1-E1-E5  
 <400> 1692

tggaacgatg aagtccagt acgttagtcc tttactggct ctcttatgcg tatgttctgc 60  
 tctggctgct gaattggcac ctgcaattgc ggattaaccg gtagatagag gatatgagga 120  
 accctgctgt accgaatatt gttattggga tgaaatatgt atcactccca cacgcagacg 180  
 tacacgaacc tactattacc attattacac aagagatgca gcataggaaa ctgtccatag 240  
 aatcgtagaa aacagtacct catcagttta aaaatctgat gcggttcgag ggtatttcac 300  
 cacatact 308

<210> 1693  
 <211> 449  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-033-Q1-E1-E8  
 <400> 1693

ccacgcgctc ggcccatgcg tctgtgaaga aaccaaagag accttattta gctatcttgg 60  
 gaggagccaa agtatccgat aaaatacaac tcatccagaa tttattacaa aaagtggatg 120  
 aaatgattat cggaggtggc atgtgttata cttttcttcg agtattatat tccatgccga 180  
 ttggagactc catttatgac gagcctggat cacatttggg agaaaatatt atgaaagaag 240  
 ccaaagaaag aaatgtaaag atacattttc cagtcgattt tgtagtagcc gatcgtatgg 300  
 ctcccgatgc acatacagag atacgtatca gagaacaagg tattcctgag catatgcaac 360  
 gactggattg tggaccacaa agtattcaac aatttattca agtactgcaa cattgtaata 420  
 cactagtgtg gaatggacct ttgcgtgtg 449

<210> 1694  
 <211> 371  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-033-Q1-E1-E9

<400> 1694

acgcgtccgc agacgagtgg ggggtggttg ggacgacgcg tctcgtgcgg ttttgtgtga 60  
 tatttgaatg gcgaccaaga gaataaccaa agagttgcaa gacttgggta gagaccccc 120  
 ttctaacggt agtgcggggc ccgtagggga cgacctctgg cactggcaag ctactatcat 180  
 gggccctcct gactcgccat atgctggttg agtggttttc ctcaatatcc attttccaac 240  
 cgactatccg ttcaaacctc ccaaagtgcg atttaccact cgtatatatc acccgaatat 300  
 taactccaat ggaagtatct gcttgatat tcttcgcgac caatggagtc caccactgac 360  
 tatctctaaa g 371

<210> 1695  
 <211> 452  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-033-Q1-E1-F1

<400> 1695

ccgggtacga ccaagcgtcc gccacgcgt ccgaaagcac tatgaaggct gggaggaaac 60  
 tgtcgaatat ttgaggagtg tgtttcgttt gcagggtcct tttgaagggtg ttttgggatt 120  
 tagtcaagga gcagccttga gctctctcat ttgtgctatg aaagaacatc cagaacttgg 180  
 ctatggagaa ttttcttgca tccgatttgc ccttgttttt tcaggtttcg tttcncgtgc 240  
 agaagagcat ttgccgttga taaaaacaaa aattcatact cctgctttga tttgctacgg 300  
 aaaagctgat gatctggttg acgcttctcg aagtcaagat cttgcccaagt tgtttgtaaa 360  
 cgctaccata ttggaacatg aaggcgggtca tttggttcct tctggagcat ctgaaagaga 420  
 acaaattact cgctttgtct tgcaacatgg tg 452

<210> 1696

<211> 375  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-033-Q1-E1-F10  
  
 <400> 1696  
  
 cgcggtccgca aacgcattccg cccacgcgtc cggttgctag aaatatcata gtagaccac 60  
 gtattgttcc aggaggagga gcgaccgaaa tgtatgtttc caaggcactg gcagaaaaag 120  
 ccaagtcttt ggaaggtgtt attcagttcc cttataaggc agtttcccaa gcaatggaag 180  
 tgattcctag aacgttattg gaaaactgtg gggcgaacgt ggtgcgagct ttgacggaac 240  
 ttcgtgcaaa gcatgctagt ggaaaggata tcccttgggg tgtgaatggc caaacggag 300  
 acattgtcga catgactcaa tatggaatct gggaacctta tacggtaaaa gttcaaactg 360  
 tgaaaactgc tgtgg 375

<210> 1697  
 <211> 312  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-033-Q1-E1-F11  
  
 <400> 1697  
  
 cacagattcc tgttgatatt cagtggaaga tttgtcatta tatggaagta ttgtgtgaag 60  
 aatcgccaa agttcccggt gcagtgattt taaaagtatt ttacgatgaa gatttggttg 120  
 aagaagatgt gatattgaag tgggtattact ctgaaaacag aggagtggga ggaaagggtg 180  
 caaggaacaa tgcttctatg ttggttgagt ggttgagaa tgctgaatca gaaagtgatt 240  
 cttcagcctg attgtgttgt tatgtgagt cttgtttcgt gaaataaaaag cgattccttg 300  
 ttttctgcac cg 312

<210> 1698  
 <211> 274  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-033-Q1-E1-F2  
  
 <400> 1698



tgtagcgga tggaaaacgg cgtacaacgc aacgtttttg ctcaaactgc tgaagcagta 60  
 aacgacaatt ccattgctgg acacaccaag ggtacttttg cagtgaaagt acggtcgggt 120  
 cagatgctga aaggtggagt tatcatggac gttgtaactc ctgaacaagc caaaattgca 180  
 caggaagcag gtgcttgtgc acttatggcg ttggaaaaca ttcctgccga tattcgcaag 240  
 tctaattggac tggcaacaat gtccgaccca aaca 274

<210> 1699  
 <211> 411  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-033-Q1-E1 F3  
 <400> 1699

ccgggaggac caagcgtcgg ccgacgcgtg ggtggagcca tgaggatgaa tcaagtgatt 60  
 gcttagttgt gtgaaggaaa taaaatattt gaatgaaaca gtcgttccag ttcaactttc 120  
 agccaacaac gaataacagt aacaacagtc atagccatac tcttaacttg gaacaaaaca 180  
 tcaaagactt gaatattgta tctagcgaca gcttatcgca cgtggatcct tgttatgatt 240  
 ccgaaaaggt tgttatccac gattgcctta ctttatggaa gagaaaatcg tccagccttg 300  
 tcagcaaata ttttggagtt gaacaggatg ttataacggg tatttatgaa cgtgggtttca 360  
 agctttggga aggtgctatt gaccttgtaa agttcctcga tactatcaat a 411

<210> 1700  
 <211> 190  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-033-Q1-E1-F4  
 <400> 1700

cacgcgcccc agatcaaaga gtaacacatg cacgtaggta tagcgaacgg gtgagtaaag 60  
 acgtgtgaaa gagtggacga acatgaaagc acagaagaat gtaagaaatg gttagagtca 120  
 agaccatacc tgacgtaaaa gcgggaatct gagatgacga gagccacatt ggcactgaga 180  
 aaaggtccaa 190

<210> 1701

<211> 90  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-033-Q1-E1-F5

<400> 1701

accacaacg acaacatcat gataaaggga ctttctcaac gctaccatcc ttcacacgtt 60

accattggga tccctaacat cgtcaccatc 90

<210> 1702  
<211> 430  
<212> DNA  
<213> Cyanidium caldarium

<223> unsure at all n locations  
<223> Clone ID: LIB190-033-Q1-E1-F6

<400> 1702

accacgcgtc ggccttgenc gccatgcctt gagttgtatg aaggctcaag tttgtgaaaa 60

aaaggaaccc attttgaaag aagaagtgga cgacataccg ttatccaagt tatggaaaga 120

actacacaag tctgaaatca aaggctcgac ggggacaaag gaaccaagga aaaaggaaac 180

gaagaaagga gcaacgtcaa agaggactct taciaaaggct tgtggaaagt cagcttcgcc 240

caaaaagaag cccaagggtat cgaaggaaag cgatgacaaa ctcgctagta agaaattttc 300

caatcctggt caaagaagag aagcacctcc gaaaggagac cctcttcgat tgttctatga 360

aagtatgtat gaagaaaaga aacgaaaagg ccaagacgca acacttgag aaaactggct 420

tctgattcac 430

<210> 1703  
<211> 228  
<212> DNA  
<213> Cyanidium caldarium

<223> unsure at all n locations  
<223> Clone ID: LIB190-033-Q1-E1-F7

<400> 1703

ggaacgctct gttgattgaa tgttttcatt ctaatttctt tgtagtcgac accattcgag 60

ggtttggttac actgactggt ggtgcncctg ttttagctct tgccgctagt ctttcgtttg 120

cg cattatta tcgacgcata agtatgccga tttgtgcaaa cgaagacaca tttttcgagt 180  
 gaatgcacaa tg ttttgcgac aataaagaat agttgtgtta ttcgttgg 228

<210> 1704  
 <211> 443  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-033-Q1-E1-G1  
 <400> 1704

ccgggacgac cacgcgtcgg acacacaaga caacaatgtc tcgtcacaag tg ttttctttg 60  
 atattgctat cgg tggacaa cctgcaggaa ggattgtatt cgagttgttc tccgatgtcg 120  
 ttctataaac cgcggaataat ttccgtgcc tgtgtaccgg tgagaaaggg tttgggtaca 180  
 aagactccaa gtttcatagg atcattcccc agttcatgtg ccaaggtgga gactttacac 240  
 gcggcgatgg aaccggtggc aagagtat t acggcaccaa gtttgaggat gaaaacttca 300  
 agttgaagca ttcggagccc tttttattgt ccatggccaa tgcgggaccg aattacaacg 360  
 gaagtcagtt ttcaatacgg tagtgaaaac accttggttg gatggaaaac atttggtgtt 420  
 tggaaagggt gtaaaaggta cgg 443

<210> 1705  
 <211> 353  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-033-Q1-E1-G10  
 <400> 1705

cgagtggctg gattcctacc gttgcagact atcgcgtgtt gacttctgtg gagaaggatc 60  
 aaactttgtc caaaggagcg gagatgcac aagaagagtc tgcataaagg actat ttttg 120  
 tatagttgcc atcatggacg gtttgtgtgg aaagttgtga ttgtgtagag agtgtgtttg 180  
 tgagttgtgt gtggtattgt tg ttttacgt ctttgtgagt gaccactcgt aggagtgtga 240  
 tgaatcctca caaagatgat agaagacaat aaaacgatgt tg ttttggtgta taaaaaaaaa 300  
 aaaaaaaaaat ttttttttta aaaaaaaaaa aagaacaaaa cgcg cattca gac 353

<210> 1706

<211> 360  
<212> DNA  
<213> Cyanidium caldarium

<223> unsure at all n locations  
<223> Clone ID: LIB190-033-Q1-E1-G3

<400> 1706

ccgggatacc aagcgtccgg cgaagagaaa tgctgggtgg agtagcgaaa caagagaagg 60  
gaagtaaaag gtaagaaaga ggaaggttt acgagagaan gaagtagaaa gaagagagtg 120  
taaggcggcg tcataataga aatccgaaag gagtacaaga aaagagagag aagaaagaaa 180  
agaagagaaa agccgtactg aagaccgaca caggtactcg angagaaagg agaccacat 240  
taaggtgaga gaatggacga taaggaacta agcaaaagga tatggtatct gcggtacgct 300  
tagaagcagc anaccagaga agaaagcgtt aaagcatgaa agaaaagata tccgaaaaag 360

<210> 1707  
<211> 146  
<212> DNA  
<213> Cyanidium caldarium

<223> unsure at all n locations  
<223> Clone ID: LIB190-033-Q1-E1-G4

<400> 1707

tcaacttgga atagttttca cgacancact gtcactcaac taattttctg tgctgactcc 60  
attcaatgac gtttctgaat atgacttccc ccatataacc acgtctcatc agataaatac 120  
atctattgcc aaactctgat tcacat 146

<210> 1708  
<211> 463  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-033-Q1-E1-G7

<400> 1708

accacgcgtc ggcccacgcy tccgctttga aactccgttt cttgatatga accgaggtct 60  
ctatcatgaa ccagaatata gtcttccgga atgttacaaa atggaacaaa agccgccatt 120  
attgaaattg ggatcatttta ggaagtttca attgcaaaca ttattttata tattttattg 180

tatgcctcga gatgcattac agatacttgc agcagcggaa ctttatcaaa gagattggag 240  
 ataccacaaa gacttgaagc tttggtttac aagagcacct ggaacaacta ctccaggata 300  
 tgaacgaaat gcttttatct actttgatat aactacatgg gaaagaaaac cttttcatga 360  
 aacgaataga aacttcttgc aagggtttct tctcaaaat gtgattacgg aagctgtgga 420  
 acatttagta aattcctctc attcgtcgtc ctaaaatcga gaa 463

<210> 1709  
 <211> 386  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-033-Q1-E1-G8  
 <400> 1709

gcgtcggcac ggattgtaat tgttgatgt tggtatgtcg gaaataaagg tttccaacaa 60  
 tacggaaaat aatgttgaaa acttggaata tactgcacac gatagcactt atttagacga 120  
 agctgacgtc gacgcggaat tggaagcaat gaagagtaga ctacaagaaa tggaagaaga 180  
 agccaatcga ctgagagaag ttcatagtac ttctgaagta ctttcttcag aagaagtaga 240  
 ccgacgtca gtatactgg gcaatgtaga ttatggttcc actccagaat aacttcaggc 300  
 acactttaag gaatgtggga ctattaatag agtaactata ctatgtgaca agtttactgg 360  
 ccatccgaaa cgatatgcat atatag 386

<210> 1710  
 <211> 408  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-033-Q1-E1-G9  
 <400> 1710

acgcgtccgg cactcgacga ttgtcatttc caacaactta tttccaccgt ctgtcaagga 60  
 aaagtgaatg tcgtggtcgt caatgctcat acgttttgta cacctcaaca agtaaccgag 120  
 aaaatcgtac gaaacagcaa gtcaccgttg gaaataagat acgaggacca ggatcatcaa 180  
 ggaggcaatt ggtttctttg tgctttggac caagactgct atgtacaaat ggccaaaggt 240  
 gctaccgatg aagaatggct tcaattattg cgtcgttggg tgccgaagaa ccaaccaacg 300

atggatagga tatgccttcc ttggatatcc caccagcatc aagtgcccaa ctatgtatat 360  
 caagcttata agcgattggg ttgttttgcg ctatcttccc aaattgcc 408

<210> 1711  
 <211> 391  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-033-Q1-E1-H1  
 <400> 1711

ccgggtacga ccacgcgtcg gggcgtgact tgacgacgtt gggaaccaca tggttcatct 60  
 atttctcagc aataggcatt cttcgaaaac tcattaggaa acctcaccct ttacaaccta 120  
 ttgtgttttt ccacaacctt tttctggcag ttgctagttt atggatgttc ctaggtatct 180  
 gtgtggctct aaagaacact tggatggaag gcggcttgaa agctatctat tgtcnccact 240  
 ctataaaaac ttccaaccca ttgacctcat ctttttactc atcttctatc ggttattggg 300  
 tgtatgtctt ctacttgtec aagttttatg agctactgga tactttttatc ctcatctgtc 360  
 gtggaaagcc actaacgttg ctacacgtac t 391

<210> 1712  
 <211> 441  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-033-Q1-E1-H3  
 <400> 1712

ccgggtacac caagcgtccg gactagttct gttgaattta tctgtatcgt ttacttgtct 60  
 ttttggtgag ttatcatggc acgaacaaaa canacagcac gcaagtctac cggtggtaag 120  
 gcacctcgaa agcagttggc aaccaaggca gcaagaaaat ccgcacccgt aactggagga 180  
 gtgaagaagc cccatcggtta ccgtcccggg actgtcgccc tgagagaaaat tcgcaagtac 240  
 cagaagagca ctgaacttct tatccgaaag ttgcctttcc aaaggttggg tcgtgaaatt 300  
 gctcaagact ttaagacgga cctacgtttc caaacttcgg cggtgactgc cttcaagaa 360  
 gcctcggaag cataacttggg cggtttggtt gaagatacca atctttgcgc aattcatgcc 420

aagcgtgtaa ctatcatgcc t

441

<210> 1713  
<211> 214  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-033-Q1-E1-H4  
  
<400> 1713

tacctcagtt agactgggag tggcacgaca aggtggtttc ttaagtaaac attttctaaa 60  
cctgtctgta atagttgctt tcaattgcag aagttagcct ccgcagggtt ggataatgtg 120  
agataaacia caagttgtgc atlgctgttt gtgagacttg cgaaaattgt gttttgtgtc 180  
ttgtaacatt ttatataaac acatattatc tatc 214

<210> 1714  
<211> 239  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> unsure at all n locations  
<223> Clone ID: LIB190-033-Q1-E1-H6  
  
<400> 1714

catgaattta acgatgtgta ttagtttttc ncttggttct cgactcctgt tggtagcaca 60  
acttgttgct ttctcttatt ttgtcaaagc agtcttcttg ttcttcttgc gtccagtctt 120  
ttgttcgaga ctagcctgct tgatttgcct tttaaaaag ttatagagtg atgtatccgc 180  
ccctatttgt tgtgttccct tgaacaaaga gataggttgt ttaaagcaag acaaggaaa 239

<210> 1715  
<211> 494  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-033-Q1-E1-H7  
  
<400> 1715

ggataccggg acgaccacgc gtccgcccac gcgtccgccc acgcatccgc ttttgtatct 60  
catcgtttgg gctgtaaatg ttgctaattg aacaggaagc tgggtgtgagc atggaagtgc 120  
ccactattag tgctgcaaaa catgactctg aagatagcca cgaagaagtg aggaagcggc 180

tgagtagagt aagcgctcca ccgtttcccg atcctacttc tctaggatta tctggtttta 240  
 gttgcacaac ttctattctt agcgtaatga atgccaaatt attgccagcg aggattgtac 300  
 caggaattgt agggcctgcc tttttctatg gtggaacggg acaaattgtg gcgggccttt 360  
 tatgttttgt cactcgtaac atgtttggat tgggtggcatt tacttcattt ggagcttttt 420  
 ggcttgctgt tgctactttg atcactttgg aagaagaacg aaaactcgtg ttcggaacag 480  
 atgccaacca agtc 494

<210> 1716  
 <211> 349  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-033-Q1-E1-H8  
 <400> 1716

gcgtccgccc acgcagtccg cccacgcgtc cgcccacgcg tccgcggacg cgtgggcgaa 60  
 aaagtaagat tgtgcttggg aagtggataa gccatcgta tatgcggagt tgagagaccc 120  
 cacttgaaga ctaaatgaac caaagggact atcagtacca ctagtcgaga aaccataccc 180  
 ctgcgtgaag ccatacctg gatttcctgc gtcaaccact gaattcagcc cgactgctcc 240  
 aaaatatgga tcgttgtagg gctgcacata ctgttggtgc tanggcagta cagcagtatt 300  
 tgaggggaaca nattcacagt attogaagtg agggattctg cttgagaca 349

<210> 1717  
 <211> 385  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-034-Q1-E1-A1  
 <400> 1717

ccacgcgtcg ggcgaaaaan aaagaatgag tggagtagta caaggagcga agatgatggg 60  
 agcaggaatg gcaacgatag gtttagcang agtangagca ngagtgggaa tagtatttgg 120  
 aagtttgttg aatgcatatg caaggaaccc agtattgaag cagcagttat ttggatacac 180  
 gatattaagg tttgcgttaa cagangcagt angactgttt gcattgatga tgagtttttt 240



gatactgttt tcatagtata cgagaaacaa gaagtagaag agaaataaaa gagacagaag 300  
aagagttatg agagacaaga tggaagtaat agaagtggta agtggagtaa taatgaatca 360  
tatgaaagaa ggaatggaga atata 385

<210> 1718  
<211> 515  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-034-Q1-E1-A2  
<400> 1718

ccggtataca acgcgtccga cagttctgtc ctgccagtac gatgctttca aaggatgact 60  
ctaagaggta tctaataact tgtattttcc atcgtatgac aagaggcttg ttggaaaaaa 120  
gcagcggata acttttgtgc tgattttgcg tcttgcttaa gtagctcgct ttactggttt 180  
caaatcttgc agtcatcagt gcaaaacatt ccactaggaa tttggactga tcgactaagg 240  
caagatgcgt gttgttttgt tgccgggtttc gttgttgttc tttgcctgta ttcggctatt 300  
ggttccaggt cctcatacgt actttctgta agagagagtt cttgaaagat gaaagggatt 360  
tgcagtaaca gagtcacaaa cagttgtgcc aactccttca tccaattgtg tgttctatca 420  
attggaatat gcagtcaaca ttgtgtaact tgatagaaat ttaccaaaga ctacttttgc 480  
gatgaaataa taatgaaaca cagagttcac atatg 515

<210> 1719  
<211> 244  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-034-Q1-E1-A4  
<400> 1719

gcgtcggcca ggcctccgct catatacttt atgcttggac aatgggttga aagactgctc 60  
tgagttgcct ctttctctcc ttccttatcg ctgccgcagt tgcagccac gtactttcag 120  
aggagagatg gggatatgct cagcacaccc aacaacagca acagtgccaa caagtatgta 180  
aacagtatgc atactaccag agtcgagtcg gcacttccgt aaccacagac agcccatact 240  
ggaa 244

<210> 1720  
 <211> 392  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-A5

<400> 1720

gcgttttgaa ttgtcatctc aaaggaaaga gcaaacgcag aatggagaaa ggaatgagag 60  
 aatcagaact tacaactatt tgcagtcaag agtgacagat catcgttcag gtttcagtgt 120  
 acaagggtgca ggatttgaag atttattgaa tgggtggagag tccctggaac aaatgatagt 180  
 tagtgtttgt gagcgagatc gacaagatct ggtagacgt gtttgaaaaa tggaggcacc 240  
 tatggatata ttatggaatg gcttttcctt aaaatagaaa atgaaatggc attgagtctt 300  
 tcgggggtata tcggcagaga ggaaacaatc aaaggcattc tgcgaatgtt ggtatttata 360  
 tttaaggagc aaagtcattt gataacattt tg 392

<210> 1721  
 <211> 94  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-A6

<400> 1721

ccacacagaa aactgaata cgatcaagaa ccaatgcatt ttaagcaacg gacattggaa 60  
 tcaaataatc tccataatat ctcaataata tgat 94

<210> 1722  
 <211> 437  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-B10

<400> 1722

cacacgcgtc cgcccacgcg tccgcggacg cgtgggggtcc aagttggcgg atttctctat 60  
 cgtaaaacag tggttccgga gcaaaatata tatcgaagta tttgccaccg cggaacaag 120  
 agctaggcaa acaagctttt cgacgatacg aaattctttt acgagcttcc tctgtaatat 180

tactacttca gctgacaaaa ctgccatgat aaagccagaa agaccaagga agcctccaca 240  
aaccatatca gttcccaaaa ggttgaaagt acaagactcc attgaaactt cgtccactta 300  
cactcaatga tataaagggtg cttagacctc ctgaccaaac agcataaatc atgtgttcaa 360  
agtaatcata agcccgtcga tgcaggatct ccagagcgaa cagtgaacct ttaagattcg 420  
cccaaagacg aagactg 437

<210> 1723  
<211> 423  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-034-Q1-E1-B11  
<400> 1723

cttgtgtaga gcggcgaacg acgtcgattg tgcggtggct tgatcggttc cttccctaata 60  
attcgacaac gagcatggaa gaaactgctg taaggattat cttgtgttgg atatttttag 120  
cgcttacttg tatatcaaca ggggtgctagt gcagcttccg caagtgggtc gcctaagaga 180  
agaacttttc gcaagttttc gtaccgcgga gtagagttgg atcaactatt ggacttgaac 240  
atggaacaac taaaggagtt gttcaactgt agaatccgaa gaaagttgaa tcgcggaatg 300  
ggatatcaaat acaaaacact gttgaaaaag ttgcgaaagg caaaaaaggt cggacctcca 360  
tggttggtca ttgtcgggtg agactgaagt tgttttcttc tctttgtgat aggaagcccc 420  
gga 423

<210> 1724  
<211> 434  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-034-Q1-E1-B12  
<400> 1724

cggacgcgtg ggtgggtgatg agaataattcg tcaattgttg acaaagaagt tggaaggaca 60  
catgctttca ttgagtttgc acatgtatgg ctgtcgagta gttcaaaaag ccttggaagt 120  
attgaaaggg aaggaacgaa ccatgttggt gcaagagttg aatggacatg tgcttcaatg 180  
tattcgtgat cagaacggga atcatgtgat tcaaaagtgt attgaattgg ttgaaccaga 240

gagcatttta tttatcgtcg aatccgtcaa aggacaagca gttgctttgg cagaacacgc 300  
 ttatggatgt cgagtggtag aaagagtatt ggaacattgt ccaatggaac acaaggcaga 360  
 aatattagct gaaataatgt ctagcgctag ggatttgatt cgtgatcaat atggcaacta 420  
 tgtaattcag cata 434

<210> 1725  
 <211> 291  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-034-Q1-E1-B3  
 <400> 1725

aggagaagaa gagagggtag gcttagaagc agcaaaccag agaggaaagc gttaaagcat 60  
 gaaagaaaag aaatccgaac aagaagagaa aaaggtacga cagaggaccg aatcagggta 120  
 agaggtagag gagcacgacg agaagagaga atgctgggtg gagtanccaa gcggggagaag 180  
 ggaagtacaa ggtacgacag aggaaaggtt tacgagagaa ggaagtacaa agaacacagt 240  
 gtaaggcggc gtcataatag aaatcccaaa ggagtcgaag aaacgagaga g 291

<210> 1726  
 <211> 91  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-034-Q1-E1-B4  
 <400> 1726

atcatctaaa cattgtgcaa aatctaattc taaataccta agaatcaaat aaaatctgac 60  
 atggtgattg ctgacactgc acaacacaac t 91

<210> 1727  
 <211> 424  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-034-Q1-E1-B5  
 <400> 1727

cgctgccagg gatcatggat atcctttacg atttggtggt cctggctatg ttggagctcg 60  
aagtgtgaaa tggctaactc gaattatctg taagatggag tctcccgatg gatattttat 120  
gacgaaagat tacaaatata tgccatctaa tatggacttc aataatgtgg attggagctc 180  
tactcctcct atcatgaact tgtctgttca gtgtgcaata tgtgatccac ttccagatac 240  
aaagttgtct ccaggccctt ataaaatccg aggatatgca ctaacaggaa aatgagaaca 300  
tagtatgaga gtagaggtat ctattaataa ctccaacgac tggcaactgg ccactttgat 360  
caaaggagaa caacttgac acatagaaat tcctaatagg gtcacttctg gaatgaacga 420  
ttgg 424

<210> 1728  
<211> 543  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-034-Q1-E1-B6  
<400> 1728

ggaatcatgg gatcaccacg cgtcggtggt attccagttg gttggaagac ttgcaactat 60  
gtgggttttc aaggaatacg ttgtactacg aaacgaaccc tagttgccta taaaagtccc 120  
atttctcgt cagctgtctt aaaatgtgct gtagaaagtg tgcattcttc agaggcccat 180  
cggaaaaaac aaaatgaagc gtggaaacac cttgatgtca ggacagaaga ggaatacaaa 240  
gctgggcatg caaaggatag tatatgtggt ccagtaatgg ttcgagggca agatgggaaa 300  
ctacaagaca atcctatggt cttgcaggac gtttccaagt ttttcaagaa agacgataaa 360  
atagtagtgt cgtgtttgaa aggcccaaga gctatgaagg ctatagagaa actacgtgag 420  
gctgggtttt ctcaacttgt gaatgtagaa cgtggctttg agaagtggca ggaaagtgca 480  
cttctgtag aaacctagtt gtgtgtctcc ctacaataga gacaacatgc gattattcct 540  
atg 543

<210> 1729  
<211> 560  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-034-Q1-E1-B8

<400> 1729

ggattcatgg gatcaccacg cgtcgcgtgt gtttgcacgt gactattcgt ccagaataac 60  
gttggcttta ctttagcaag cactcttctt tggaaccggg ggcagttata tcatgttatg 120  
gaagtcttta ctggaatata taccttccaa ggaagttttt atttcgtttg ttcgtttacaa 180  
gcctcaacct aatcggggaa atcttgcaag agatttactt gcaaacgaaa ggacttttct 240  
ttcgtggctt cgtacgggaa tggcatctat ttctgtgggt ctagcttttg ggcgtctcat 300  
tggaactacg ctctcggaag tagtgggaac cttgtttgta tttctaggcc tattttattgc 360  
ggtatattgc tgtatccgat attatgtaaa tgtgtttcag atagaagacg acaagtatac 420  
agcggacaca gttggtcctt ggatattgggt ttccttggtg gttgctattg cggccgtatc 480  
ctttgcactt atattcgtgt agttaattga atatttacct agtatgaaga catttaattg 540  
atataaaggg actaaaatct 560

<210> 1730

<211> 438

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-B9

<400> 1730

aagaaagctg agtcaggggtg tcaatactgc gttgaaatcg ggtatgaagg acgatgaagc 60  
tgtcagatcc gtggaagaaa gaatagttag tgaagtagaa ggtgaggaag cagaagaaga 120  
ggcaggagga gaagaagaag agcaaaccac ggaaaaggaa gaacaatcac ccaaagagac 180  
tttgactttg gatgaatatt tggctaagca agcagagaaa aagttacaac ttgccaattt 240  
gttgggaaac aaacctccca aagtcagaga aaccagtaca gtagcagttg atgatttgaa 300  
gccttggaag agagaagacg acgatgatcc aactttatca gaaataggtc aaaagaattt 360  
gcagcagcag caacaaaatg ctgtaaataa tatgaataat agaaaggata acaagaacaa 420  
gacagtagat atgaccaa 438

<210> 1731

<211> 242

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-C4

<400> 1731

ccaaacctgt gcaaaccaat gggtgacgag gaaaatactg acgaattgaa agtaatatca 60  
gctgctagtg gtttacgcaa gagtatatat ctttatctca ttgctgtttt tgcccgcacac 120  
tttcgaatcc cagtgcagta tatccgaact acaggagatc ctctccctca aaacgcttac 180  
catcactcgg ttgggtggaa ctatctcgga aactctggag cgatgctccg taaaaaattc 240  
ca 242

<210> 1732

<211> 480

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-C5

<400> 1732

accacgcgtc tggcttcgtc tactcacgag aggtattgca ccagttacta aaagcatttt 60  
gttatccaca gtaaagtata atagtccttt gcagctgagt aaagcagaga tatggagagc 120  
ttcttatcca actggaagca gacgttcctt tgcagaacaa aaggcagagc agcgggtccaa 180  
agaaggtgaa gaaccaataa cgccttagcg ggggtgtgacg gagaagctgg ataaaagaga 240  
cccaaactat ccttggaagg tatctactcc aaatatgttt aactgttct cattttgttg 300  
cttggtactgg agaagttttc ttccagaaca tacctataaa cccaacctca atatcaatct 360  
ggacaggcat catacacctt tagatttttag agatagagta gtcgggggaa tcgtcttttt 420  
tttaagattt ttgcggatgc cttttttcag aaacgatacg gacactgcgc tgttgtgcta 480

<210> 1733

<211> 593

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-034-Q1-E1-C6

<400> 1733

ggaattcaat ggatcaccac gcgtcggcgc ggaggcttgg aagctgacat gcagagacac 60  
agaatgaaga cgacatttat tatgtcttcc ggcacgttgt gtcctacttc acgcaagcat 120

cgttgtgtac aatgttgtca gtcgagaacg tggaagatgc aacttgctcc aaagagaagt 180  
 tacgacagat acattccatc acctcctggc cttcagaagc taagagatta tcaccctcga 240  
 ccaaattacc caggcacctt agcgcttggc ataacaccgg atattttaac ggtggaagag 300  
 ttgctcgaaa gccaacgga aaatctagcc tgtgtagagt acgacatgga cgaacgtgct 360  
 cctctcgtac gggaacgtga cgactgcata ttggattggc tggcagaaga tggacgtttg 420  
 attgaagatg attgggatgt ggaagacaag acttcttttg tagaaagtgt ggatacgatc 480  
 ggtgatgcta ccctcgtaca tgatgaanaa gtattagcag agtatttacg tgaagcggat 540  
 gcttcagaag atgaatacta tttagaagaa gtggaaacgt gatcaagttg tca 593

<210> 1734  
 <211> 454  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-034-Q1-E1-C7  
 <400> 1734

cggacttttc aggcacccaa ggaacgtnta aaccaaagat cgctcttcta aagccggcct 60  
 tcagtttcca gttggacgtg taagtagatc ctataagaat ggaaactagg cagaagaatt 120  
 tggacctgga gcagcgggtg attaaccggc attttgggaa aattggacgg cggagttggt 180  
 ggaacgggca ggcaatgcac ctcgtgatac cangaaaacc cgtagagtcc cacgtcagat 240  
 tcatttggca gttcgtaccg acgaggacct taccacgtg ttgggcgggtg tgactattgc 300  
 ttcaggtggc gttcttcaca acgtccatcc caatctgcta ccaaagaaga acgcaaagga 360  
 agacatgcag tacattttgc cttgacctgg tgtctttgaa caccaccttc acaagaaact 420  
 tgtcacttta ttggaatgta ttgaacatgt gaaa 454

<210> 1735  
 <211> 575  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-034-Q1-E1-C8  
 <400> 1735



accacgcgtc ggactggagc ctcttaattg agtgccaaag aagaagaaga aaaagaagag 60  
gaggatgtcg actttgtggg gaaaacccaa gtctagaaac gtacaaatag aacattgggt 120  
acattctttg gaagaagttg aacaagtagc taggtcagtg gaaccaaagt tggtttcaac 180  
tacagccaaa tggaaaggaa ttgccagag gtgcaaagaa atagctaccg acctttgtca 240  
aatattcaac aagaatgacc cccattatga ggttctattg gcattctaca caagttcgag 300  
gaagtttgaa gacgaacaac atcaagtac caaggttggg attgttgtgt acaagtattt 360  
gttgtaaacc atatatctct ctctctcttc catatatata tatatatata tatatatata 420  
tagatcaacg agcttaggga tagaccagtc gagaggttgc gccactattt accggacatt 480  
cagcaactga aagcacagtg tgtcgaagaa caaagttgc gtgcccgaact agagcactat 540  
cacgccacag taaagtcgct agacaagaga cacgc 575

<210> 1736  
<211> 430  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-034-Q1-E1-D11  
<400> 1736

cgcaaagcgg gacagtgaga tgtcggaggt ggcaggcttt gttgcgtgct gtaatatattt 60  
gttctttacg acttttagat aataaattct tggaaaaagt taaatttagt ggggaagcgt 120  
cgattgacag tttcttgagt aaacgggtccg aactgagtta aaggaagtct ccgttacgtg 180  
gcgaacaaca gaaagagtag agttcttttag tatttttagag tatttttaaaa tactaaaaaa 240  
aaagtttcgc ctagaatgat aatttcgaga cgcccaggtt ggtgtcgaag aacaagtttt 300  
ttagtcgcac cagtatacgt ctctgtacaat agaattgatt tgcaagactc ttttgtctct 360  
ccgttccttg aactgtttct tgccaattaa agtcgctttg ttctgaaaaa aacacgaccc 420  
gccgcgtggg 430

<210> 1737  
<211> 386  
<212> DNA  
<213> Cyanidium caldarium  
<223> unsure at all n locations  
<223> Clone ID: LIB190-034-Q1-E1-D2

<400> 1737

cgcgctcgggc aagcactgca tcaagtaagt atctcttcag aagatcaagt acgagtcttg 60  
ctctgctcaa tatgaagttc anaagatcaa gcagcaacaa tgtactatga cagtctctga 120  
acaatacata cagcccgata cttgctacaa gtatgtccct gaacaacagg tgggtgcctca 180  
tacttggttac aagtattatt ctgtacggga gtgtgattga aaagtgctat cctcagtatg 240  
caacaacgga gaaatgtgta gagtatgagt atgttccata tgccacttct acaccttatc 300  
catcggtatc tctaagttat actccttcag catatcagac aacttctgct tactaaagag 360  
ccgaacactg gatagatttt tgaagt 386

<210> 1738

<211> 546

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-D5

<400> 1738

ccacgcgtcc gcgcagcgat tccatgttga aagagggtac acgtatattg tccgatctca 60  
agtttcaggt gcttcaagat ggaaaacctc aggtgataac ttcggatcaa gtattcggag 120  
gaaagaaagt agtattgttt gggttacctg gtgcctttac tccaacctgc tcgaggcagc 180  
accttccagg ctttggacag aagggtgatg aggtcaaacc gaaaggagta gatacagtcg 240  
cttgtttagc tgtcaatgac ccttttgtat tacatcagtg ggcagagtca cagggagtgg 300  
caggaaaaat tctcatgtta gcagatggtg gtgcgcaatc tgtcaagaaa cttggactgg 360  
atatcgatac tggtgacttt ggtggtattc gttgtcgtcg attctcaagc ttgattgatt 420  
attatgtcgt gaaaaagctt catttggaag aacgcacagg atttagtggt gcctcttccg 480  
caciaacaat attgaaagat ttgtcttgaa tacatttggt tgtcatacca cttgtgtcgt 540  
tgtttg 546

<210> 1739

<211> 545

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-D7

<400> 1739

ggattcatgg atcgaccacg cgtcggggcca cgcgtccgca cacgcgtccg cctattatga 60  
acgatcacag tgatcatatg agattaatgc caccattggc tgcaacttgt attatgactt 120  
tgtgtgccaa tcattgaaag tcccgttatc gcaaccgagc cactgagaat ttaaaggaat 180  
tgcatagggg gagttcaggt ttcatatcgt tgatgacatg ggcggggaga gatacttttag 240  
aagaatgtac agaagcttgt ggaggtcaag gatataaaag tgaaaataga attggcgtcg 300  
tgatgagctc ttttgatgtc ttactgacct atgaaggaga taagttggtc ctgtcacgac 360  
aagtcagccg aagcgtaatg aatgattttc tcaaacagat gaagagtgga aagttcgttg 420  
gaccgttgtc atatgtgaag gatcaaagtg tcttaactgg atcacttcca gaagatattc 480  
atagtattgc ctattctcgt ctcatctttac agcgtttgca accgatactg gttgctaatt 540  
tggca 545

<210> 1740

<211> 537

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-D8

<400> 1740

ggaatcatgg gatgaccacg cgtcgggccga cgcgtgggtg agctattcat gcagttgttg 60  
gcatttcagt cgtctacttg gagtcattgt actcgcagct ttattcaatg tcccaagtct 120  
atcaatattc taaaaaacia ctatacctgt cgtacgttgt ataaacgtag ccaattggct 180  
cgagggatat cgttgcgta agtccccgaaa gcagagttgg agaggagccg aagacagtcg 240  
ttttgatgcc aatccttttg tcattgtaat tgctttgctt ggttggactc ttcttgctag 300  
cattccttcc aatattccac ttttacgtgg cactggattg actcaagcct ttttcacttc 360  
cattcaatcc aacttggtc aatggcccaa aggtcctgcc ttggatgatc ctttctggct 420  
ttatattatt ctatggcatg ttggactttt tatcgtagtg ttctttggta ctattggata 480  
tgggattagt cagaaacgag tatagctgca agtattcata aaatgctctc gtgtggg 537

<210> 1741

<211> 307

<212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-034-Q1-E1-E10  
 <400> 1741  
 acgagtcctgc acacgcgtcc gcaaaaaact atacgtggga atctagcttg taaggacaat 60  
 gtcgtctact tattacgaaa tagataggga aattattcat cccaatatca atcccagagg 120  
 acatacgata atcggtggtg atgacaggca cgttgccagg attagatccc tatggcagcc 180  
 tttaacaactc atttcttaca atactatgca gaacattgta cgttttgttc ttttggtttt 240  
 tgggtggtgt ctggatctat atctatttac aggtattgct gcgtaggtc catcgaatac 300  
 tgactcg 307

<210> 1742  
 <211> 439  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-034-Q1-E1-E12  
 <400> 1742  
 gtcagcagaa gaagagcagc aactgaaacg tactatttta gaagcagaaa gaaaccatac 60  
 agcggaagaa tatttattgc attcctattt agagaaggag aagcctgatg aagcggagcg 120  
 tttcttaaga gactatattt taaatgatgg ttgggtgaag aatatatacg aagctccctt 180  
 attgaatggc gaagtacaga atatggaaat agatgaacaa gatgcagagt ttgtggaaaa 240  
 acaagaagag tttgaagccg cttataattt tcgatttgaa gaaccaatg caactgaaat 300  
 agtttcgtat ggacgaggca catcatcttc ttctcgagcc aaggaaagca aaagaaagag 360  
 aaagagagca cgacaagaga tgaggaagaa agataaaata gagaagagaa agagggaatg 420  
 ggagcctcag aagaaggaa 439

<210> 1743  
 <211> 286  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-034-Q1-E1-E2  
 <400> 1743

cgcgctcggtc gtggctagga atgataaatc catggatagg aggaataatg ataggaatga 60  
gtaagaggag tggtaggaag ggaataatag cacgtggaat agtatggata ataatagaaa 120  
gggagttagt acagaggata acggaggaaa cgatagtaga acacatgatg gagactatac 180  
gatatgaaat acgagtcgat cggatgtcga taggatttat gtggttgacg agtgtgttga 240  
taagcgaacg ggtgagtcac gaggtgtgaa acagtggacg accatc 286

<210> 1744  
<211> 152  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-E3

<400> 1744

aatgaactag gcacaaggat atcgatatctg cggtagacca tatgaacgag ccagcaccga 60  
ctgttttagca gaaacacagc actctgcaca aaagacaaca tctacactat acagtgtgcg 120  
gcctgcccac tagtagacac gacatccatc aa 152

<210> 1745  
<211> 521  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-E6

<400> 1745

accacgcgtc ggacaaattt tggatgacag gcgtagacaa gcaagctcaa gaagaaagaa 60  
gtagaggaaa tgagtatttt cgcaataaac agtacaagga ggcatgagag tgttatactg 120  
ttgctcttag gtatgcttat aaagttaaag agtgctttat taacgaagag gactatagta 180  
aagaaatgag tacagaagac cgggcagcgt gttttgcgaa tagagctgca gcaaagctaa 240  
agttggagga ctatgaaggg gctttggagg attgttccga agctttgagc ttggatgaaa 300  
actattggaa agcaaagtac cgacgaaagg aatgctattt gaaactgggt cgttatgagg 360  
aagctttgaa agatgcaaag gcactaagag aagcacaaca gatattctcg gaagaattac 420  
aacatataga acagttgaag gagcgagacg atgaaagacg taaagaagaa gctattgcca 480  
agttgaacga agtcggacat agtggttcttg gctatttttg t 521

<210> 1746  
 <211> 114  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-E7

<400> 1746

gatggaacag gcataagcca gacgattctt tcatgaagcc cactctacag gggagtcaat 60

catatgcaat gtagatattg aacattcgga ctttcatacg caactcttgt gtat 114

<210> 1747  
 <211> 428  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-E9

<400> 1747

cacacgcgtc cgcccacgcg tccgcccacg cgtccggcag cggataagca tttggtgcct 60

catttgcttg gttggttgga tcgttggttg agtgactgga tatcttttgg tcgtttttta 120

taaagcagat atggttgctt ccaatgagga agacaaacca tggaataaaa ttctcaaagt 180

caatcctaaa aagagaaaat ataaacgctg tttggtagaa gacgagaatg tggagaacga 240

tgtggaagcc aacgttcgaa gggaacgaat tcgtgtacta agagaagctc agaaagtga 300

agaaaagacc aactggttga attggatgga caacattgga gacaagactc ctaaagaaga 360

agaaaagaag gaaaatttgg ctatggaagg cttgaaacat aactttgaca ttgaacaaaa 420

ggatgacg 428

<210> 1748  
 <211> 430  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-F1

<400> 1748

cgcgctcgggc cgaagaaaga ggagaaagat acttttagga agctttggca gctctacaca 60

acagaagcag atagagatgt ttctgctcta gaaaaagagt tggaaaaagg acagttatcc 120

ttt gatccat cgttgcgtgt tgtggtggct ttctatatgg gtttgtat tt tgatagtttt 180  
tattcagata ctcaacgacg agataaatgg tggaaggaag cttgtgaagt aaagttggaa 240  
aagaaacatt tctggcaatg ggttgcggaa gccaaactgg ctgccaatgt tgcttaaggt 300  
tgaagtcgta cgtattcgtc ttgtgtgggt attccttttc tatattaagc cacgtgggtg 360  
atggatagat tagaaaagga ataaccttat caagactcga ataaataaag attggataaa 420  
aagttttttt 430

<210> 1749  
<211> 302  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-034-Q1-E1-F2  
<400> 1749

gaagctttgg cagctctaca caacagaagc agatagagat gtttctgctc tagaaaaaga 60  
gttggaaaaa ggacagttat cctttgatcc atcgttgcgt gttgtggtgg ctttctatat 120  
gggtttgtag tgtgatagtt ttattcaga tactcaccga cgagataggg ggtggaagga 180  
agcttgtgaa ctaaagttgg aaaataaaca tttctggcac tgggttgcgg caccacact 240  
ggctgccact gttgcttagg gttgaactcg tacgtactcg tcctgtgtgg tcattccttt 300  
tc 302

<210> 1750  
<211> 492  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-034-Q1-E1-F3  
<400> 1750

cgcgctcgac agtggatgtc gattacaagt tggatgatt tgggtgtgcg ttagggata 60  
gttcggatga tatcaacaag tttctatggc ctattcgaat ttctcattcg gttgatccga 120  
cagtggatga aagtgcttat cttacagccg atggtaacta tcgcgttggg gaaggagcgg 180  
gtccagcgtt ggtggagtcg ttgatgtaga agctttgtta ttatagattt ggagaagtgc 240  
agtttgcg cgggcatcct gctgggtatg ataaggttcg aggtgaagtt atagcgaata 300

agaacttcag actgcgttat ttgaggaga ctttactag tcgcaattgg ttggttcgca 360  
 tttatcatgt gaaagacttg ccacatattg gataacctgt cagatcatat catccaatga 420  
 gaatatatgt catccagag attccgacat gttgtggaca atatctgtat caatcgcccc 480  
 accacttttt tt 492

<210> 1751  
 <211> 451  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-034-Q1-E1-F4  
 <400> 1751

cgtcggccccg cgcgtctgcc acgcagtcgg acgtttgaaa ggcgtccagt atgaaaggag 60  
 aaacgagtgt agcactgtct agtcgtcgaa ctgagcgaaa cagcaataac tgtgaaaatg 120  
 cagtaaaacta gcagtatgac ggaaagaccc ataattcttg actagatagg tttagggagg 180  
 agagagaatc atgaagtaga ggaggtgggg taagagatga aagaccactg catgaggata 240  
 aggaatctaa ctgagtaagg aaaataagct taagctaatt ccaccagtga agtaaagcct 300  
 aagaaagagt aaattatgca agcaaaggca tgagagaagt ataatagcag aagcatgctt 360  
 gaagaacaag aaagagattt cagaaaggga agaaaagtca gctatagaga atatgtgaag 420  
 gagaactcac accgaggaga gcaccgaacg a 451

<210> 1752  
 <211> 564  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-034-Q1-E1-F6  
 <400> 1752

cggaatcatg gaatcaccac gcgtcgggta aacaacatca tattccatgt attgccgatg 60  
 gaggtgtatc ctctataggt catattatca aaggactttg ttgtggtgct tccactgtaa 120  
 tgttgggaag tatgttgga ggaacggaag aagctcctgg tgaatatttc tataaagatg 180  
 gcattcgttt gaaacgatat cgtggaatgg gatcagcgga agctatgaag aaagggctctg 240  
 cacttcgtta tttctcgga gatgatcggg tgaaagtagc tcaaggagtg agtgggtgcag 300



taatagataa aggaagtatc aaaagatatg ttccttactt gttgagcggg gttcgtcatg 360  
gctttcaaga tatgggcgta gtcagtgtag accaactgca tgactatata gaccaacgca 420  
agttgcgtat gcagcttcgt acaccggcag cacaggtgga aggaaatgtg cattctttgt 480  
ttacgtatga gaagtccaat gtttgattcg tctctgtgac tagtatgaat atacgcacag 540  
actaaagata attctatttt tggc 564

<210> 1753  
<211> 340  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-034-Q1-E1-F7  
<400> 1753

gaatcatgga atcaccacgc gccgggcaag taaaagcgga gaacagagag gacgaaagcc 60  
agattggaac cgagaagacg tccatacaag agaagtcagc agtggggaaa atcgggcaat 120  
gtcccgggaa gtatgaccca gtaatgagga gtggactaaa cagaacagga agtacaacga 180  
cggactgaac ggaacttacg gcaaaaacac gtgccaccag cagcggtaaa acgtgtgcag 240  
cacgcgtaga gcagacgaac tgggtgtacc ggtcgagtag tacagtaagt gtccaacgga 300  
tcggacacga gagaaccagg acagggatga aatgcacaga 340

<210> 1754  
<211> 453  
<212> DNA  
<213> Cyanidium caldarium  
<223> unsure at all n locations  
<223> Clone ID: LIB190-034-Q1-E1-F8  
<400> 1754

tctaaagata tacgtggaca actaagcttt aactttcaga gggtcacaga aaatcctgaa 60  
cattggttga tcaagtttac aagaagcttt cttcgtattc ttcgaaatta gaactttcca 120  
natccttatt gctagtcata ttgtcttcaa ccatgatagc cgagtaacta agttcctgct 180  
tccttcgctc ctgttcttgt ctttgtaact tttctgcctt gagctgttct ttgaaagcct 240  
tttcaagcat cagatgtcgc aacaagtctt tctctagttt tacttacctg ttttctttta 300

agtatctgct ctctttcatg atcttctttt tctgtgcca agtttgaaa cgcttccttc 360  
 ttcgacttct cgagtcggtt aattatatca ttcgtcctct tttctacagt tatactctta 420  
 acacgctttc tatcgtgaca cacaacttgt cct 453

<210> 1755  
 <211> 430  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-034-Q1-E1-G1  
 <400> 1755

cgcgtcggcc cacgcgtccg ctgaagcaca gtttggcact tggatcacta tagtaatggt 60  
 actttgctat tcttttgaaa ctccaatcgg tatacttatt ggtattggtt ttgcacacac 120  
 ttatcaggaa aactcctcgg catctttgtt aacgagaggc attttggtg ccatctccgg 180  
 tggaatttta atatacacag gattggtgga gttgttgact tattggttta cgcgcaactc 240  
 gaacttttta agacgcanag ccatatctat ttttagtatt gtgggatttg tctgggttagg 300  
 agccatctgc atggcgatta tcggagcgtg ggcctaagaa taaaatttgt ttgagacgtc 360  
 gtggtgcaga tgactcgcat gtttgggtact tgggtcaagt ctgacaagag aaaacatttg 420  
 ttgctacttc 430

<210> 1756  
 <211> 416  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-034-Q1-E1-G2  
 <400> 1756

gcgtcggcct gttcgctacn acatttatca atacttatat gtttattgca tcgactgcac 60  
 acaatattca actttatatt atctttttta ccttggaat gcaactagtt ctcgtcgata 120  
 tgcatttctt tggagctatc agttcagttc ctggtggaat actaggaatg ctgtgttcca 180  
 taagtgcctg gggtctatct gccactattg tcatcaacga cagttttgga actacgggta 240  
 ttccgaatcc ggaactgaag gaccttcta ttttccgtga ttgggtaaag atgatcaaag 300

gagagaagaa gtagttgagt tgttgcttgt ctagagtttg tttgtcttgc ttagttgctg 360  
 tggagtgtgt ttagtcaact gtcgatattc gacattattt cgtactttta taaata 416

<210> 1757  
 <211> 390  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-034-Q1-E1-G3  
 <400> 1757

ccggtacgac aacgcgtcgg cactgactctt tgtggttcgc aacgggaagt tggaagaact 60  
 tcgcgctcaa gttcctatga atatacaagg taagccaaga aggcttgttt gtgcgcaaca 120  
 cacagttgan actactagtg gcactattga cccggacgac ttgagacgac accaacaact 180  
 cttacgaaga atgcgtttcg gaaaaagtta aaagtttatt ccagccgttc canacgatcg 240  
 atcatttgtt ccagcgtttt caattcatgt tcaagagctt gcaagagttc gcgttgattt 300  
 cgcaaatact ctttcatata ctttagggag cacttggacc catgaacgat tgaaaccaac 360  
 aattcttctc tgaccgatgc caaagtacag 390

<210> 1758  
 <211> 197  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-034-Q1-E1-G4  
 <400> 1758

aaagaacgta tcaaggaaaa ctttgatgtc ttattcgaat tgagtccaca cgatatgaag 60  
 gaattggaag ccttagataa gaacataatc ctcaatcatc aaaaggaata ttgggggtttc 120  
 aatattcacg cttgagagag tctttgtcgt acaataaaca aatttcttgt tgttgctgct 180  
 gctgtgaaaa aacatca 197

<210> 1759  
 <211> 200  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-034-Q1-E1-G5

<400> 1759

accacgcgtc cgtccttgca attggtagaa caatagtaag agagagagaa ttggctctcg 60  
ttcttgtgac atatatatat atctatatat acacatatat attaggcttt agatatttac 120  
atctacagta tccaatggta tttcggaggt ttgtatacat tggaagagtc gtcgtgggtca 180  
accatgccga ccacccaggc 200

<210> 1760

<211> 480

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-034-Q1-E1-G6

<400> 1760

accacgcgtc ggcccacgcg tccgggcata acattgaaat gttatggaac gtctgggtgc 60  
ggcggttgcta agattaagga ggaagttaac aagtttctag ttccagtttc ttcacagttg 120  
gaattggaga agaacgatat ttgggctatt cagttgggtcg tgagtacaag ttacaataat 180  
gaagtatcca atcattttgt agataagcag aactgggtaa tcgataccag aaaaaaggtt 240  
tcttcttcgt catctactcc ttccgatgat atgaattact ccaactccga tcaagagggg 300  
ctccgtatcg gccggaactg ccaacttgta ntttgctcga tagaaaactt ggaaaagtgc 360  
ttgggtaaag aaatttatga ccanatccag aaagctcgct gctcggagag ggaanacttt 420  
ttgaccaatg tgactcctct atccagtctg ataggaacgt tggtcgaaca tggatgggca 480

<210> 1761

<211> 512

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-G8

<400> 1761

ttgctgtcat ggtatccgaa gaggaagaac ttccaattat agtggaaaaa cacaatagag 60  
gaaaatatgg catcgcatth gatccgcttg acggctcatc caatatcgac tccaacgtga 120  
ccatcggaag tatttttgggt atcttccgat tgccagacgg tgagagcata cagacaaccg 180

atgaagcttg cagacaaatt atgcaacctg gaagaaatat ggtggctgca gggatatgcaa 240  
 tgtatggaag tgcaaccaat cttgtgttgt cattcggtaa cggcgcccat ggattcacgt 300  
 tggatccttc tcttggagag tttgtgttga cacatcctaa tataaggatt ccacgcatag 360  
 gtaaaatata ttctgtgaac gacggacatt gcaaaaattg ggataaacca gtggtacaat 420  
 atattcagtc cttgaagtct cctcctgaag ggaaatctcc ttagtccttg agatatactg 480  
 gctcgatggg tgcagacgtc catcgactt tg 512

<210> 1762  
 <211> 481  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-034-Q1-E1-H1  
 <400> 1762

gcgtcggcac taatgcaaga gcaaccaaag aagannanan aacaagataa aagccaaatc 60  
 ggccttgctc caatattttc ttcaaaatag agttgaacta ccagtcgaca caaagcttgg 120  
 acgactccaa gatggcttgg taaccttggt ctgcacgggtg gctcgccctg acagaaaaag 180  
 aaaggaccag ctggctacta taagcaccaa tcgctagttg ctacattgca agtgccacaa 240  
 atgtttgctc tttatcgact cacacagggc ctagtctttc tctttctgtg tcgacgagtg 300  
 cgtaaactg acgtcttggg aacgcaaccc cttagtggca cacgaagttt cctgtgcagt 360  
 gtcggactat gtgaaaagca cagcaaagtg ggaaagagtt tcgactcctt gntgtttctc 420  
 cactagcaat attgaaccaa agtgttttcg cacattttgc actgaaacga atggctgact 480  
 c 481

<210> 1763  
 <211> 245  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-034-Q1-E1-H12  
 <400> 1763

actcagcatg tagacaactc ctaacttctt gatgaagtgt cttaaactgc cgtagtatca 60  
 taaacatcac aagcctttcc atcgcagtac attttcattg attcgcccag aagactcacc 120

ttctactcga ggatataagt ttcaagtatt actttcgcac attctttatg ttcatggaa 180  
 tttttgtaag caactgggag aattgagat atttcgccag aatttgggta acgagattcc 240  
 aaatt 245

<210> 1764  
 <211> 345  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-034-Q1-E1-H2  
 <400> 1764

tagcatacat gacattacag tgtctaagt ttcagatgct gcctttggag aatggagagc 60  
 attatcggt tcaagtagag cgaaagaact ggaacacaga agaaacgtca acaaagcga 120  
 aatagatagt ctcaagaaga ctcttaccga aaagtcaagg cttacatttt ctggacaact 180  
 tgaagaagtc tatcgaagga atttaaagat attcaacgag ccgggtgaca ctggtggggc 240  
 acttcacttt atgaaaaatt aatatcaaaa cagtaatagt gtgattgtgt gggagcttta 300  
 ttgtccgctt gttgtctaac ccaaatagtt gttgtgttg taaaa 345

<210> 1765  
 <211> 412  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-034-Q1-E1-H4  
 <400> 1765

acgtacgggt gaatcaactc aagctgaaga actttcaggc aaccgaatg gtcacagga 60  
 gatatagaac acctgggttt actcgatcag tattcttctt atgaaagtac gattgctaca 120  
 gcttcgggct ataaacttaa gatgttggtg attatctttg aaatgggtgt agcttttcac 180  
 tccgtaatta ttggtctgaa tcttggaata agcacaggat cgacattccg tacgttgttt 240  
 gctgctctcg tatttcatca attctttgaa ggatttgctg tcggtactac tgtttctgaa 300  
 gccagtttg gcaattggat cactatagta atggtacttt gctattcttt ggaaactcca 360  
 atcgggtatat ctattggtat tgggtattgca cacacttatc aagaaaactc ct 412

<210> 1766  
 <211> 469  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-H5

<400> 1766

ggaattacgg gatcaccacg cgtccgacct ggagtacatg aatcctacgt tatgtgcgag 60  
 tgatgaaata agcctaataca tcattctggct ggaaccttaa ctgaaagtgc aactcgtgag 120  
 gaagaagaga caatcgaacg aattgccaga tagcgtcctg ttatggacgt ggaaacgttc 180  
 atagcttgct gtactgcgga tcattgctttg aatttttttt cttatacaag atacgatgct 240  
 tttggtcttt tatgtcacgg acgaaatctt ggtttcgact actgcacgtt ttattctgtg 300  
 tgttttgtat gtgtgtctag gtgtgttcga taaaaatcac ctatactctg gtgacaattg 360  
 ccggtgtgac gataccttca gttgactaaa gtttctatgg accatcagat tcacgaggta 420  
 atatgagtaa gacacgaatg aagtagggcg gactttctaa acaatgcat 469

<210> 1767  
 <211> 481  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-H6

<400> 1767

accacgcgtc cgccacgcg tccgggcttc atctggagga ggaggaggag atcgtcttca 60  
 agtagttcct tcaagaatga cattgacgca aataaaaggc cgtctatcag gagcaaataa 120  
 agggcatagt atgttgaaga agaagagcga tgcgttaact gttcgtttgc gttccatctt 180  
 gaagcaagta ctggagagga agaatcagtc gggagattta tgtcgtgagg cgcttatttc 240  
 cttagcagtt gccaaagtata tagtgggaga agagttcaaa gtgcatattt tggaaaatgt 300  
 agataagagt tcgttgaaag tgtcgtttca ctcgagaaac attgccggtg tgacgatacc 360  
 tttatttgac aaagtttcta tggaccaaga tagtaccgaa gaatatgaaa aagacacgaa 420  
 tgatggaaga ggagtttcaa tcaaggcttg tccaatcatc agtttcactc gtttgtgtcc 480  
 t 481

<210> 1768  
<211> 168  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-H7

<400> 1768

accacgcgtc ggctcaacg tccacactag aaagaccaac gagccttgta gtatttaaaa 60  
gtgaacaacg tgattccttc acagttgtct ttgcaaaact agaatcctgt gtaccgtgga 120  
atattgccat attctgtttt tcttatataa acacttttat tttcttgt 168

<210> 1769  
<211> 217  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-H8

<400> 1769

ccacgcgtcc ggctaagaag gtcacattat ggaattggga gcatcgaatg gttatacaag 60  
acttttttagg gcatgaaaaa ggagtaactt ccttggtatgt gagcgtcatt taaattactt 120  
tgtagtttat attccgagac tagtttgttt tgtattttct tcctttcggc tcctatgagt 180  
gagtattacc gcatgaaacg aaaatgtttt ctttctc 217

<210> 1770  
<211> 436  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-H9

<400> 1770

gaaagaaaag tccggttaaga gagtgcgtgt gactgtatgg catggctctc gaaaggattt 60  
ggcttgtctc aacacagttt gcacgcatat taaaaatatg atcacggggg taaccaaggg 120  
ctatcgatac aaaatgcgct tggtatatgc acactttcct atcaacgtta ctgtgtctga 180  
caatggcgat tatctggaaa ttcgcaactt tctgggtgaa aagagaactc gtcgagtata 240  
tatgttatct ggagttgtgt gcagtcgctc ggaaagtgtg aaggatgaaa ttattctcat 300  
aggaacgac attgagcaag tggctcagtc agctgcgaat attcatcagt cttgcctagt 360



gaaagaaaaa gatataagaa agtttctcga tggaatttat gtttctgaaa aaggccctat 420  
tcctgaatat gattaa 436

<210> 1771  
<211> 366  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-035-Q1-E1-A1  
<400> 1771

accacgcgt ccgcgcagcg attccatggt gaaagagggt acacgtatat tgtccgatct 60  
caagtttcag gtgcttcaag atggaaaacc tcaggtgata acttcggatc aagtattcgg 120  
aggaaagaaa gtagtattgt ttgggttacc tgggtgccttt actccaacct gctctaggca 180  
gcaccttcca ggctttggac agaagggtga tgaaatcaaa tcgaaaggag tagatacagt 240  
cgcttgttta gctgtcaatg acccttttgt attacatcag tgggcagagt cacagggagt 300  
ggcaggaaaa atttcatgt tagcagatgg tgggtgcgcaa tctgtcaaga aacttggact 360  
ggatat 366

<210> 1772  
<211> 341  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-035-Q1-E1-A12  
<400> 1772

atcatctaatttttttttgg gggaaagcgg tttggctcag agggctcttc ctatttaggg 60  
atatatgggt gtcggtgtat acaaccataa atttcgcaa tacaatggac gaacctttct 120  
ttaagttttt gtacaatggt ttccactaaa ttattggccc tgcttgaaag ttgctagggt 180  
ttccagacca aaatcttcaa tttcaggttg tccccattt ttgcaaaaac tgacctcgtc 240  
tgctgtgtag acacgtgttg gtgaaatatt aacatacaac cgttctgggt tctaaagga 300  
aaaacagttt tagacgatac aatatacaca gacacactca t 341

<210> 1773  
<211> 313

<212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-035-Q1-E1-A3  
 <400> 1773

accacgcat cgacaattgc attctacttt ttattaatga agtaaatttc aatagaatct 60  
 ggcataaaac aacttatttg gaaaaaatca atattgtcca catgtcacaa caatgggatc 120  
 cgtacgtaat gggcgttttc attcgattgt ctaccactca ctctctcttt ctccaatctg 180  
 gcacttcggt tggattcaac gtgaatagcc caccttatca cagtatcaga ggaatagatg 240  
 gctatcattg gtatagcctt gcagccagta cccttggtat atagtgggtca ttccatgcct 300  
 tgtttacatt caa 313

<210> 1774  
 <211> 424  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-035-Q1-E1-A4  
 <400> 1774

ccggtcgacc acccgtcgaa gcagtgaaga aattgattgg cttcctccgt tcgtttgcaa 60  
 agggtaaaac ctttttaaaa attcagttgg aacaaaataa cggaaaaaat ggaatcctaa 120  
 aacatcatta aaaaaagggt aaaaaaagga aaccctttga atccttcccc ttttaataaat 180  
 cactttggcc ccactgcact ggcattattc gactcgctca gcagttacct gtggttgatg 240  
 tagaagcggc caatttggtt gaagaaaaac agtgtcaatc ttctgccgat tattctgttc 300  
 cagttttcag aagtcgggat catgtccgag tctccctaag accgtttcaa attgtctctc 360  
 ttcaatttca gcttggttga agttatcaaa atttggtgtt tcagtaaatt gtccttcatt 420  
 tcgg 424

<210> 1775  
 <211> 371  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-035-Q1-E1-B1  
 <400> 1775

acgcgtccga tttattggct cgagcatttg aatatattgc tagtgaaact caaggagttg 60  
ctacagactt ggttttaaaa gttatctcca ttcttggatc ttctgtaggc tactctggaa 120  
ttgttggag tcaagtcgtt gatattcaat cagaaagaaa ggaggatata agtgtcgaag 180  
atctcatttg gattcataaa cataagactg gggcattatt gaaatgttgt gtagtaactg 240  
gtgccttgtt gggtaggagca aataaagaag atgtttcacg tattggagaa tatgcagaaa 300  
gaattggttt ggcctttcaa gtagcagacg atatcttaga cgttacttca tcgtttgaag 360  
aattgggcaa g 371

<210> 1776  
<211> 286  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-035-Q1-E1-B11  
<400> 1776

gtccggaaaa ggcaccgctt ggtagcagtt gtacattcaa catcatcaaa tgccaaaggg 60  
aggaaagaaa gattcttcaa agaaagaagc cacaagtaaa cctgcagcag cagatgctac 120  
aaagacgaca gaaaagtctg gtccggaagc caagttgaag ggaactggtg caaagaaaca 180  
ataaaaagtt gactatgcat gtgcagtcct gttatgtttt gtgagttctg tttgatagtt 240  
tccagctatt cttttggtag tgaataaaga gaaaattttt tatatt 286

<210> 1777  
<211> 225  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-035-Q1-E1-B2  
<400> 1777

ccatttgtca agagccactc ggagccttgc ggaggacggt ggttttagcag ttagcaccac 60  
tcttgggtat tctgtacgct actctggaat tggtgcaggt catgtcgatg atattcagtc 120  
agcaatgttg ggtgatttca atgtctgcga ctgcatttgg tttgatttgt ataagactgg 180  
ggcattattg aaatgttgtg tcttatctga tgccgtgttc ggtgg 225

<210> 1778  
 <211> 375  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-035-Q1-E1-B3  
  
 <400> 1778  
  
 acgcgtccac ccaagcgtcc gagcgcacgg aaatattttc tagtcatgca aatatttgtg 60  
 aaaacgttga caggaaagac cataacctta gaggtcgaac cttcggatac tatacaaaat 120  
 gtgaaatcaa acattcaaga taaagaaggt ataccccctg atcaacaaag gcttatattt 180  
 gctgggaaac aactcgaaga cggaagaact ctgtcggact ataatattca aaaggaatcc 240  
 acgttgact tggattgag gttaagggga ggtattatag aaccaacttt ggcagcattg 300  
 gcgagaaagt acaactgtga cagaatgata tgtcgcaagt gttatgccat attgccagca 360  
 agagctcaca actgt 375

<210> 1779  
 <211> 399  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-035-Q1-E1-B5  
  
 <400> 1779  
  
 gacccacgca tccacggacg cgtgggcgga cgcgtgggtg ttgcgtcatg caagcacgac 60  
 atggctctgc accggtagat gtcggagttg agtgggtgag agcatgagga gcttggagtt 120  
 gttatacttt gttgatcttt acagtaagaa gtggaatatg aactagtcta gacctggaac 180  
 cctatcagtc tgggtctact attaacattc tacacgcgac agtcaccgtt ggtgtgtttc 240  
 actggataaa acggagtcct tttcctacca actgggtaga agactactac gtcgataagt 300  
 aaacgtggtg ggagcaaadc cataggaaga ggcacaagac tccgaataga aagttcttca 360  
 ccgctgtagt ggtcgactg tacttaactg ccgttcaat 399

<210> 1780  
 <211> 386  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> unsure at all n locations

<223> Clone ID: LIB190-035-Q1-E1-B8

<400> 1780

accacgcgt ccgcccacgc gtccgcccac gcgtccgccc acgcgtccgg tgcaaaatcc 60  
gattctgcag cttttggaaa aggatgaact cgctcaactt tgtctogtct tcttttctta 120  
actgtcatag tatccagata aagacttcac gtagacaagt attgaggcca tacagacatg 180  
ttgtgagtag ctccaagtct ctgaaacttt cgtgccaaat agaggataaa gacacgtgga 240  
gtcgtcgcaa gtttcttctc acttcacttg gatttgtgtc ttctgcgctg ttcctttatt 300  
ctcaagattc ttgggttcc agagactatg cagggtgttg ttatttgggc ggnggtgata 360  
aggttgacat aaacaacgct aatata 386

<210> 1781

<211> 414

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-035-Q1-E1-B9

<400> 1781

gtccggtcaa gtgatgctgg aggaggaaaag gtgaggcggg aggttggtta gagattactc 60  
attgtgcttg gctgaagga ggatgagcac tatctcggtt tctctcaaga aaccggata 120  
tgattccttt ctagggtttg ttcccataca aggtattggt ttgtcaccaa ggaaactatt 180  
caatacgtgt tgtgctcgac cgangagagc ttggacctct ccaaccacca taaagtgtat 240  
ccaagacaac ctccatgagt gggttcggtg taaagtattt cgttgtggag aaaaacatat 300  
atttctaggc cctaacaaca gcttaactgg ttccaatgca ctgcctatcg aaatagaaag 360  
ccaactggat gccgacttgt tgcgttctgc actcggattc tatcgcaagc aaag 414

<210> 1782

<211> 390

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-C1

<400> 1782

cacgcgtccg accaagcgtc cgcccacgcg tccgcccacg cgccggagg agagaatcgt 60

catgcttcgg atctcaacga ggatacttgt cactacagaa cggatagtag agtaccgaa 120  
aatgtcatag ttcgaaaaga tacaaacgtg tcttttttgg atttgtgtct ttttgccttt 180  
gatcttttga ttagtcgtct tagacacttt tcggagcctt ctgtgccagc ttccatacca 240  
gacacggatg actatgcact ttttgtgacg tggaataaga aaggtagaga aggtgagcgt 300  
gcacagttgc gaggttgtat aggaacgctt tcacctttga accttcgaaa agggatacat 360  
acttatactc tagcaagtgc tttcagagat 390

<210> 1783  
<211> 397  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-035-Q1-E1-C2  
<400> 1783

cacgcgtcca gcgaaacaag agaaggggaag taaaaggtaa gaaagaggaa aggtttacga 60  
gagaaggaag tagaaagaag agagtgtgaag gcggcgctcat aatagaaatc cgaaaggagt 120  
agaagaaaag agagagaaga aagaaaagaa gagaaaagcc gtactgaaga ccgacacagg 180  
tactcgagga gaaaggagac ccaaattaag gtgagagaat ggacgataag gaactaggca 240  
aaaggatatg gtatctgcgg tagaacatat gaaagaagca gcaccgactg tttagcaaaa 300  
acacagcact ctgcagaaaa gagaaaatgt aaagtataga gtgtgcggcc tgccaaatag 360  
tagagaagaa atcgatgaaa gtgaaagcga gtaaaag 397

<210> 1784  
<211> 384  
<212> DNA  
<213> Cyanidium caldarium  
<223> unsure at all n locations  
<223> Clone ID: LIB190-035-Q1-E1-C3  
<400> 1784

cggctcgacca gcgtcgatgt aggtggtgga aggcgtaact ttgtgggttt ccnacaagat 60  
gtcttttaaaa ttcgtgaatc aaaggctttc aacccccgta tggacaaccc gtggatttac 120  
ccaccggaat aatgtatacc ttgaaccaa tgctgtaa atgtcaatttt gctttttctg 180

ttgtagtcat tgcaatgttc tcccaattta ccttttatca ataccgtgac ttttaattgtg 240  
 ctttcaatgg gcattgggat tacgccacgc ataccaaatt gtctggctct gtgggttatt 300  
 gccgttactt cattgctttg gggagcattt ccatcgtagt tttagctatt gttgccgtag 360  
 ctacttttgg aacgctgtat ttg 384

<210> 1785  
 <211> 395  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-035-Q1-E1-C7  
 <400> 1785

gacccacgca tccacccacg cgtccgcca cgcgtctgcg gacgcgtggg tgggtgggta 60  
 ggaggaggct tggatcatata tgtgataatg attatggttt tatgtagtga taccaggatt 120  
 atggaacgat tctatgataa gatgagtgag tgtagttagt agagtttcag atcatgtatt 180  
 tagaggaaat tgataaagat gtgtaatatg tgaatgggtg tttgggtaac attcaaagt 240  
 agtattcatt aggtcttatt ggaaagtat tgtaagtga aggacagatg cgtcatctag 300  
 gattgaatat ttacacataa tttgagtgtt tagatttaaa taaggaaaag atatagatct 360  
 gaattgaaat gtgatttgat aagatatata ttttg 395

<210> 1786  
 <211> 218  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-035-Q1-E1-C9  
 <400> 1786

tccgctacta tcaacgtgtt tttctgggct tgggtggttg ttggtgctat cgttgctact 60  
 gcggcaagac cttctacggg aatgctgaac ttgcacaaca acaggacgga agtacacgca 120  
 gtggaggcct tgctttgggc caacatgtgc ttgtactcct tcaatatcat cttggccttt 180  
 ttgatatacc ggggttggtta aagcggcttc tggccccc 218

<210> 1787  
 <211> 395  
 <212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-D1

<400> 1787

accacacatc cgattacgcc tgctcttgc agaaactact cttcatcgac taagaaagtc 60  
aaacccgctc caggaacgta tgcaagtcac acacgaagct atcattgtcc tatgctgagt 120  
ttttgcacat tccaggtaag catctcgctg atacacatca catgtgggtc aacatgtcat 180  
aaagaagttc aaagatgcgt aactgtggg ccaccaggaa tacttctaga gttcatcca 240  
tagcgtatct agtaaagtat acagtaaagg aagaggtaga agaagcaaag ggggactcag 300  
agcgagaatg tgattaatct agtgggaaat cgaccaggaa ccaacataag gtatcagagt 360  
aagtatcgaa ggaaaaagag aatgagaaa gggta 395

<210> 1788

<211> 397

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-D10

<400> 1788

gtcatgtcgt cttcaaata gtccatcgag acgttattgc caaagacgtt tcctaaagaa 60  
atccctactt cgtaatggc cgtggaagca cttttgggca atccagtact cgcgctcgac 120  
gtgtatttat atcttgccgt actccacttg aactttaatg cttcaagcgt ttcgttgatc 180  
atcgggtacta cagtcggctt ggtgcttcta gttacgtcgt atcataaaac tgcataatgcc 240  
aagtgggtcta agctcgatcg cacaacagag caaccaacca agagctcttt caagggtaat 300  
ttgtcggcat accgaagtgg agttgagagt cacctatggc tcctggaaag atctcgggtca 360  
gttacagtgt aatgataaac aacgcaatat ttcaagc 397

<210> 1789

<211> 312

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-D12

<400> 1789



gaagagacga gtcacgga acttgtggag tttgttgctc gtgcaagttc agaatccgac 60  
aagttgttgg tgaacgatag cgatcgagta tttcagtatt tgtattcgac gttgttcggg 120  
acggagacca aagacgatcc tacaagccga cgagtggata ttatcgtcga caatgcaggt 180  
ttggaactgt tttgtgatat gtgtttggcg cattatctca tcgcctctgg gatagcggac 240  
caagtagttt tccatttgaa agcatatccg gtgtttgttt ccgatgccat ggaaaaagat 300  
ttgtggtata tg 312

<210> 1790  
<211> 400  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-D3

<400> 1790  
aaaaaagagg aagagaagaa agagaaggag gaacaaaaga agtctttcga acagttgtgc 60  
actgttatta aggaaattct tggagacaaa gtggagaagg tggtagtctc cgaaagactt 120  
gcggaatctc catgtatcct tggtactggg gagtttggtt ggtcggccaa catggaacgt 180  
atcatgaagg cacaagcttt gcgtgattcg tccttggcaa tgtacatgtc atcgagaaag 240  
ataatggaaa ttaatcccaa caatgccatc atgcaagaat tgcgtcgccg tgtggaagca 300  
gacaagtcag acaagaccgt gaaagacttg gtcaatttat tatttgacac tgcattgttg 360  
acttccggat tctctcttga cgatccaacg tttttgcctc 400

<210> 1791  
<211> 387  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-D4

<400> 1791  
cgcgtccaat aaaggaggaa gagaagaaag agaacgagga acaaaagaag tctttcgaac 60  
agttgtgcac tgttattaag gaaattcttg gagacacagt ggctaattgtg gtagtttccg 120  
aaagacttgc ggaatctcca tgtatccttg ttactgggtga gtttggttgg tcggccaaca 180  
tggaacgtat catgaatgca caagctttgc gtgattcgct cttggcaatg tacatgtcat 240

ccagaaagat aatggagatt aatcccaaca atgccatcat gcaagaattg cctcgccgtg 300  
 tggaagcaga cttgttttat tagaccgtga aagacctggt caatttacta cttgacactg 360  
 cattgtttac tttcggattc actcttg 387

<210> 1792  
 <211> 426  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-035-Q1-E1-D5  
 <400> 1792

acccacgcgt ccgcccacgc gtcgggttgg taagcgtgca catgttcgcg taaagttgag 60  
 tgaaagtcgg tatagattcg aggacctcaa ggggagacta tagtgcaaca gaagaacata 120  
 gataagcagt catttagctt cacaacacca cagcacgttc ttgctggaga ttcgagtttg 180  
 gcttccaacg atattcactg gcctcctgca agttatcact tttgtttcga agctagtcct 240  
 cttcgtcctc ctcaaggttc acctgtacca agaagaaagg taatactgaa tgtacaaact 300  
 gattttgtgg cgtcggatta tacggatatt gcaaaagtgc aacacttgaa tagtttgga 360  
 gctgccttgc gtcggatgga agaacaattt ggtcagatag ttgtaaaact ggaaaatgtt 420  
 aaaaac 426

<210> 1793  
 <211> 265  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-035-Q1-E1-D6  
 <400> 1793

gacccacgca tccagttcta cagttgatac ctgtactagt aggaagtgcc gtttgagctc 60  
 aacttgttct gagtgcggtt caagttgata acgttgagaa cactcgagca tctgaaagtc 120  
 tcgcgataag ccaataagtt tctcacgcaa ctttctaaaa ctgtgtcatg atctgattga 180  
 ataaccgaag aaggcttcta agtatcatca ctgcactcta gcgggaaccc acggatgact 240  
 caaggcagga ccacttcgac cttca 265

<210> 1794

<211> 390  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-035-Q1-E1-E1  
 <400> 1794  
 atggcgattg ggaacgagaa aggcgtcgac gacgaaagaa gatcgctgta ggaacaacga 60  
 cataaaatgt ctgttttatt acaaagttcg gatttccaac acattcttcg tattctgaat 120  
 accaacattg atggcaagag gaaagttatg tatgctgtaa ccgccataaa ggggtgtgggt 180  
 agacgtttct ccaatttagt cttaaaaaag gcggaggttg acctgagtaa gcgtgctgga 240  
 gatttgacgt cygaagagat tgaccgcata gtcaccatca tgcagaaccc ccgacagttt 300  
 aaaataccag attggttcct caacagacaa aaggatgtga gagacggaaa atactcgcag 360  
 cttattgcga acaatctcga ttttaaactg 390

<210> 1795  
 <211> 346  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-035-Q1-E1-E10  
 <400> 1795  
 gtccgcccgc gacggaagaa ctagaccgtt atatgctgga gacagagaaa aaatggagcg 60  
 tgaagagaag caaatggaag tgcacgtgtt gcaagttcaa ctcacaaaga gactgtcaga 120  
 gaaactgctt ctagtctgtg cgagcttccg aaagaggaag aaatcaacga tgaggagcga 180  
 gaattgcgag agttggaaca aagtatggct gtatagtttt ggaaagcagt gttagccact 240  
 taagagcctg aattttaaaa tatattacat atatatccac agtaaaagtt gcgtgtggta 300  
 ataaattgtc tgtagtcttt cgtcaaaaaa aagagacaaa aacaag 346

<210> 1796  
 <211> 410  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-035-Q1-E1-E12  
 <400> 1796

gtccgcccac gcaaccgccc acggtccgg taagatcggt ttatgggtggc tgaggacttg 60  
accttttcagt tctttgcatt tttttcttgg actcagagaa cactttttcaa acacacctgt 120  
aaatgttcac aacataaatt cagagtcctt ccatgcagag tatcgtcagc gaaattacct 180  
gcgatacgga cttttcctgt tgttaccatg ggattgaacg actcgtagag agaacgacta 240  
agtatatctg atcttaccgt agaagaagtc gctgaagact acggcctacc tttggaatac 300  
gtcatcgatg tacttatcag taatgggtgtg gaagaacctg tataccctaa cgacgttctg 360  
tcaagccgag taaaggacag tagaaaggcg gaagtcttag aaaccctttc 410

<210> 1797  
<211> 413  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-035-Q1-E1-E2  
<400> 1797

ccgggtcgacc acggtccgc gcaggtggaa ggatgcttga gcggcagaag aatgggtgtgt 60  
ttgcatcctt gtaacaacac tacttgtcac ttgggtcaaa atatgtttcc ggaaaccacc 120  
cagacaatg tttctagtta tcccgaata tgtagacagc tagagaagag caaagtgtgt 180  
gcgcaagtgg tgtgtccaaa accccacaga gtttccaacg cgttgagtgc gttggaactt 240  
caaaatttta agcttgaga gccttgtttt cagacagcag aggcagaaaa ctacaacaga 300  
gactcgacta ggccttttag ctgtccctgg tccaacacgg aggagcctgt agcaatagta 360  
ggggccttgg acgtggaaag tcatcgagac ataactctc cagaaaggac aga 413

<210> 1798  
<211> 359  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-035-Q1-E1-E3  
<400> 1798

attagtcgtg atttcgtcta tggcgtttac gagtttcttt ccttgccacg cgctttccaa 60  
tacttgcagt aaattctcca actgttctcg tagaaaaaag actctagggtt ggggtgaacc 120  
ttttctgtgg agatggaaca aacaacttgt cataaataag cagagaagag ctttggggtc 180

gaacaacgtg agcattctat ttagtcttgc ggtgttgga gatagtcctg ggtcgtcttc 240  
 tgtttctacc agcaacgact ttcataacgg caaagaaaac aaactgagtc tagaacagct 300  
 tcaactgaat aaggaatatg aagctgtagt aacaaaagta acagaatatg gcgcctttg 359

<210> 1799  
 <211> 407  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-035-Q1-E1-E4  
 <400> 1799

acgcgtccaa gtagtcgtga tttcgtctat ggcgtttacg agtttctttc cttgccacgc 60  
 gctttccaat acttgcaagta aattctccaa ctgttctcgt agaaaaaaga ctctaggttg 120  
 ggttgaacct tttctgtgga gatggaacaa acaactgtc ataaataagc agagaagagc 180  
 tttggggtcg aacaacgtga gcattctatt tagtcttgcg gtgttggaag atagtcctgg 240  
 gtcgtcttct gtttctacca gcaacgactt tcataacggc aaagaaaaca aactgagtct 300  
 agaacagctt caactgaata aggaatatga agctgtagta acaaaagtaa cagaatatgg 360  
 cgccctttgta gacatagggtg cagtaaagta acgcttaatg catgttt 407

<210> 1800  
 <211> 391  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-035-Q1-E1-E5  
 <400> 1800

gacccacgcg atccacggac gcgtgggaga tggcgcaacta tcaacattac cgagctagta 60  
 cagcgggtat agctttggga gaagcacttt ctgaactcaa ggaacagaac ctctttacgg 120  
 aagcggaaga agatgtgatt tggaggaagt ttgaccgtgc catgacagaa gcccttgct 180  
 ccaacgttgt ggatacacac cttacgttga aagggagtct tcatcactag cgactctgtg 240  
 ataacgtgtg gcaattcttc gtgaaagacg cacaagtgac atttgacaaa aggtcggact 300  
 ttacgcccg cgtgttatctg aaagtagttg cttgtgatta tgtaaagcct gtcaacccta 360  
 agtccagtca ggtttgaagc ctaatcgttg g 391

<210> 1801  
 <211> 337  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-E6

<400> 1801

aaccatgctc tccatttaga gatcatcacc cagtatgtgc ggggatgaca atttcatttg 60  
 gagtggtgcg acgttatggc tatttatgta acgagacgtg atgagaaaac tgagtgcctga 120  
 tgtagtatct cgacaaaccc ttacaattgc cagcgcgttc agtgccttcg aacttcacaa 180  
 tttgaagctt ggagagccgt gttttcatac atcagacgca gaaaactaca atagagactc 240  
 gactaggcct tttagctgtc cctgggtccaa cacggaggag cctgtaacaa tagtacgggc 300  
 cttggacgtg gaaagtcac cagacataac tctcca 337

<210> 1802  
 <211> 377  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-E7

<400> 1802

acggacgcgt gggaaaagag agagaagaaa gaaaagaaga gaaaagccgt actgaagacc 60  
 gacacaggta ctcgaggaga aaggagaccc aaattaaggt gagagaatgg acgataagga 120  
 actaggcaaa aggatatggt atctgcggtga gaacatatga aagaagcagc accgactggt 180  
 tagcaaaaac acagcactct gcagaaaaga gaaaatgtaa agtatagagt gtgcggcctg 240  
 ccaaatagta gagaagaaat cgatgaaagt gaaagcgagt aaaagatgag gtatagagaa 300  
 tggcggtcct aacagtaagg atccaaaggt agcgaagtaa atagacgttt gaaaggcgtc 360  
 cagtatgaaa ggagaaa 377

<210> 1803  
 <211> 332  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-035-Q1-E1-E9

<400> 1803

cccgtccgcc caccggtccg gaagaactag accgttatat gctggagaca gaagaaaaaa 60  
tggagcgtga agagaaagca natggaagtg cactgtttgc aagttcaact caciaagaga 120  
ctgtcagaga aactgcttct agtcgtgtcg agcttccgaa agaggaagaa atcaacgatg 180  
aggagcgaga attgcgagag ttggaacaaa gtatggctgt atagttttgg aaagcagtgt 240  
tagccactta agagcctgaa ttttaaaata tattacatat atatccacag taaaagttgc 300  
gtgtggtaat aaattgtctg tagtctttcg tc 332

<210> 1804

<211> 390

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-F1

<400> 1804

atgtgggttg tggagtaagt gcgcttggca gcaaactaaa agatggcaag aagaatcatc 60  
ggagcttata tgtctgacgc tactgtagcg tctctattta gcgtgaaaat gttgttctac 120  
cttacaatac ttgcgttctc tatcactatt gtgggtctta tgggtaagag ttccgacggt 180  
atttgggttc acagtgttcc agcgaaagac gaatattgtg catacaagtc ttcccttcaa 240  
gtaaaccacc acggcatagc ttcctattgc aagtatatca tggctgtagc agctattggt 300  
ttggttatca gtttcttcga gttttggtat gcattcctcg gaattttctt caagtggcaa 360  
caaaagttgt ggtatattga atctgctatc 390

<210> 1805

<211> 334

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-F10

<400> 1805

gagatgcacg gctgggtggct atggagtttg ttgttggctt gtttgtgttt gttccacta 60  
tccaactccg ttcaacaaga tgaagcgttt gttcctattg gtcctcttcg tgaaaaggat 120  
gagcacgcaa cacagccttc acaacctgtt gtaaagccac acggtagtaa ccactggaag 180

ccgctccagt gtactcccaa caaggaaaaa gcagaggcat tgatacaaaa ggcacaaaat 240  
 agtttgagtg cgcttttctc aaaccggttg ttcaagcata tagacgtcga aagttgtcaa 300  
 gagtttagag tggtcgaaat aaagcttgac gaaa 334

<210> 1806  
 <211> 474  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-035-Q1-E1-F11  
 <400> 1806

ggtcggagtt caggggtggcc cacgcgtccg ccacgcgtc cgggaaaagg tggtaaagg 60  
 cttggaaaac gaggagccaa acgtcatcgt aaagtacttc gagataatat tcaagggtatt 120  
 acgaaacctg ctattcgacg tttggcaaga cgtggtggtg taaagcgtat atctggcctt 180  
 atctatgagg agacaaggaa cgtgttgaga gtgtttctgg aaagtgttat tcgtgacgca 240  
 gtaacttaca cggagcacgc tcgtagaaag actgtcactg caatggacgt ggtttatgct 300  
 ttgaaacgcc agggtcgtac gttgtacggt tttggtggtt aagaggcaaa caaagacatg 360  
 gtgtttttca acaccaccag ttgtgaaaga aacttgggtt tcagtctcag tagacccttc 420  
 cttgtttatg anattacagc tttgcaaata taaanactt tcattttacg ttgt 474

<210> 1807  
 <211> 321  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-035-Q1-E1-F12  
 <400> 1807

tccgcccacg caaccgcca cgcgtccgcc cacgcgtcgg ccaacgcgtt caaaaaagg 60  
 aaagctttaa agcatgaaaa aaaagaaatc caaaaaaaaa aagaaaaagg taaaaaaaa 120  
 gaccgaatca gggtaaaagg tagaggagca agaagagaag aaagaatgct ggggtggagta 180  
 ccgaaacaag agaacggaag ttaaactgaa gaaagaaga acgtttacga gagaacgaag 240  
 tagaaagaag agagtgtaag gccgcgtcat aatagaaatc cgaaaagagt agaagaaaag 300



agagagaaga aagaacagaa g

321

<210> 1808  
<211> 387  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-F2

<400> 1808

aggacgcgtg ggttttgcaa gtttgcactt tgaaagacgc gcttggacta ttgtatcggt 60  
gattctgttt ttgtttcggt atccatttat gacatgtcaa gttatttttg ccattcattg 120  
ggaagcttac aagttgtgga aaagaaaatt tcctttttat ccacatccga ataatagcca 180  
aaacatgtgg tctcgaacta tcgattatgt gagttcttgg ttgcgtaac aagtcgtcaa 240  
gtaaacatgg caactcttct tttatcatct tcttggccat gtccaggtct cctcagaacg 300  
atgtgataat ctgccaacgt tcgagtcgca aaacctgctt cacaataaca aaaataataa 360  
agccatttgc gaataaatat ccagtcg 387

<210> 1809  
<211> 279  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-F3

<400> 1809

ggtcgaccac gcgtccagaa attgttggtg aaatatgaca ggaagaggaa aaggtggtaa 60  
aggtcttggg aaaggaggag ccaaacgtca tcgtaaagta cttcgagata atattcacgg 120  
tattacgaaa cctgctattc gacgtttggc aagacctggg ggtgtacacc gtatatctgg 180  
ccttatctct gaggagacac ggaacctgtc tagagtgttt ctggaaaatg ttactcgtga 240  
cgcagtatcc ttcccggagc acgctcgtg aaagaccgt 279

<210> 1810  
<211> 305  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-F4

<400> 1810

accacgcgt ccgaaaagaa aaagaaatga gtggagtagt acaaggagcg aagatgatgg 60  
gagcaggaat ggcaacgata ggttttagcag gagtaggagc aggagtggga atagtatttg 120  
gaagtttggt gaatgcatat gcaaggaacc cagtattgaa gcagcagtta tttggataca 180  
cgatattagg gtttgcgtta acagaggcag tatgactggt tgcactgatg atgagttttt 240  
tgatactggt ttcatagtat aggagataca cgacgtagac gagaaatata tcagagagtg 300  
ctggg 305

<210> 1811

<211> 409

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-F5

<400> 1811

agttggttgg gtcgttggtg ggacagtcac gtagtagaaa tggctttaga caatgtcaaa 60  
aatgagcaga tggaaagaat ccgcaagaca attatttcaa gggtagcaga cgcttctacc 120  
gtggttgaaa ttggagcagg ctacaggtctc aatttctctg actacccttc ttatgtgaag 180  
gatttgacag ttattacttt acaagaagaa ctacagcaaaa gagctcgaca aaaggcacia 240  
cagagaggtc tgaatgtgca tcatattcag ggagatggcc gagtacttcc ttgaaagat 300  
aactcggttg atgtggtcgt agcaaccctt ctattgtgca cagtaagcga tgtcgcgggg 360  
tttcttcaag aagtttctcg tgtgttgaaa caagacggca agtttttcc 409

<210> 1812

<211> 375

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-F6

<400> 1812

gccgaccac gcatccacc acgcgtccgc ccacgcgtcc ggtcggttctt tggtagggac 60  
ttgtgcgtac ggtgtgtgtg tgtgtgtgtg tgtgtgtaac aactatcagc accacaaaaa 120  
gatggttcgt atgagtgtat tagccgatgc tttgaaatcc atcgccaatg cagaaagaag 180

aggaaagcgt caagttctca tccgcccag ctccaaagtc atcatacgtt tcttgacgtt 240  
tatgcaaaaa cacgatatata ttggagagtt tgaatatgtg gacgatcatc gctcgggcaa 300  
actcgtcgtt cacttgatag gcagattgaa caagtgcggt gtgatatac cacgatatga 360  
catgaaagtg cacga 375

<210> 1813  
<211> 395  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-F7

<400> 1813

aggacgatat atgtagaatt ttccaacaag caataactca aaaacaacat cagctcgata 60  
cctctcgtgc ggacttgta aagaggaaac aacatatcca acaaatgcaa gagcaaaaag 120  
aacaggagat caatacacag cgtgcaaaaa ctcttgaaac gttacaaagg cagcgagatt 180  
cactcgaaaa caatttgaaa ctgttgaga ccgaagtga cagcatgcaa tccgaactga 240  
gtaatatcac agcgtcttta aacgaagcac cacaaaatga cgatgacttt gaatacctta 300  
ccaattttcg aaatagcctt gtggaacagg tcgatgcgaa acaacgagag ttgcaagaat 360  
ggaaagaaca aagcaggctt cgtcagatgc aactc 395

<210> 1814  
<211> 435  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-G10

<400> 1814

gtccgccaac gcgaccgcc acgcgtccgg caggacaaac ggacaaggac caccacgttg 60  
gcaacgttgt ttcaccaaac aacgtcgcag aaataagaga agaatttctt cgtaaagcaa 120  
agagagttca tccagacgga caaagacata atgaacgtgc caatgaggag tttgtcatt 180  
tgaaagagga gtatgaacgt ctctggagg caacccaaag caaccacaca acgagtagaa 240  
acatacttgt ggaacacatt cccttgaaa agtggaagag aacaacgaca ttgcaagata 300  
tggaacaata caactacgcg gagaatcatc attgccaaca agtatacgtt gagacctact 360

gtcgtatgtgg tggactagtc actatagaag cagatgatga cgaggatatt aggagactat 420  
tgaataataa tgaga 435

<210> 1815  
<211> 448  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> unsure at all n locations  
<223> Clone ID: LIB190-035-Q1-E1-G11  
  
<400> 1815

gtcgcccgac gcgtccgcac attggaaaag atagacttgt ctcaaggcag ctttaaagta 60  
ctccaagact gtgacaaaga tttagaatgt gatcataata ccaagtttca gttggnactt 120  
attcagtatg gtctcttttc acctgggttt tggacgagag aaaatgttct gctcttctat 180  
ttggagctcg tgtcagggtgt attcataagg gacactctct accttttcta caacaaaggt 240  
gaagaacatt tgtttgcgag tttaatgctg ttgttgaga cacaagtctc actgtatgca 300  
gacataaaaa caaactggga gaaacgacac tttatcggtg gcctcatcgt caggctcttg 360  
tgtgaggaat atcaacgaca gtattcagag ctatgttcac cgaatgaaag cacgaaagat 420  
atgctactag taaacagatt gtttcaaa 448

<210> 1816  
<211> 383  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-035-Q1-E1-G12  
  
<400> 1816

agatagactt gtctcaaggc agctttaaag tactccaaga ctgtgacaag gatttagaat 60  
gtgatcataa taccaagttt cagttgggac ttaatcagta tggctctctt tcacctggtt 120  
tttgacgag agaaaatgtt ctgcgcttct aattggagct cgtgtcaggt gtattcataa 180  
aggacactct ctaccttttc tacaacaaag gtgaagaaca ttgtttgcg agtttaatgc 240  
tgttgttggg gacacaagtc tcaactgtat cagacataat aacaaactgg gagaaacgag 300  
actttatcgt tgggctcatc gtcaggctctt tgtgtgagga atatcaacga cagtagtcag 360  
agctatgttc accgaggtga aag 383

<210> 1817  
 <211> 382  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-G2

<400> 1817

agcgaaatga gcgattgtca gatgcattgc ctaacgttta ctggttgctt ttccaactca 60  
 tacttgtcaa agagcttttg cacaagatgt gaaaaaata acaggtacaa aagaaatttt 120  
 aaagtcggaa agcaattatc ttgtcggata aaggcttccc ttggagaaga gtttgataaa 180  
 gttgctctcc ctacccatt tggaatagta tttcgtgact tgaaccagtt acctgaaaat 240  
 atactggata tagcaagtgc cgctgataaa agtgagacca gacgagactt ttttacagaa 300  
 gagaagtttg aggagttgac tggcataatt cgtacaaaag gcggtggcac agttgttggt 360  
 cctaacgtct ccaacacacc gt 382

<210> 1818  
 <211> 356  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-G3

<400> 1818

aggaaatttg tagtgaaacc gatcattggc tccgaatgga atccgatgcg gttcaatcgc 60  
 agttgttata ttttgacgtt cctttgactt tttctgctgc ctgttttctg ttgtgttttc 120  
 tgttttgtgc atttacagga atgaatacgg gaattcctat ttatcattca tcgcatgcga 180  
 tcgactattg gttgggaatg atacttatag ttgtggtata tcttagcagt tatgcgtgga 240  
 taatgacatg aaagcttggt cgaagtggc cgaaactatc tcctggacaa gtccctttg 300  
 atcttgccaa acgtgcttcg catcatat caacacagga tagtgacaat agtggt 356

<210> 1819  
 <211> 414  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-G4

<400> 1819

cccacgcgtc cgcaagcacc aaagaaaccg cacgtttgct gattggacgt tgctttcttt 60  
gtaggaaatt tgcgatgtcc gacgatcaga cgacaagact cggctctttg tggttgtctc 120  
gacaactatg tatctctcta tggatgttgt ggtgtggaat gaggtactcg tataggttgg 180  
aacgtttggt catccattga ctagtgaata atactcgatt ccgtatatatt tatctcttta 240  
ttttctactt gtacataaaa ctagttatat gtctggtagc tataaaagcc ctttgccatc 300  
tcaacattta tataaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 360  
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaagg gggggccccc caaa 414

<210> 1820

<211> 414

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-G5

<400> 1820

gttgaagaaa aaagagttgt ctgaggacca aacagagtga caagaagaga tggcaaggag 60  
aatattgggt gcttatatgg gagatgccac agtggcaact ctgttcagta tcaaaatggt 120  
gttctatctt actatcatgg gtttctccat aactatcttg gctctcatgg gaaagaactc 180  
ggatgggtatt tggatacata gtgtgccacc tgcagaacaa tattgtgcat acaagtcttc 240  
attggaggtg aaccaccatg gaattgcttc ctattgcaag tatatcgttg ccgtagctgc 300  
tattgggttg gttatctcgt ttttccagtt ttgctacggc ctggtgggta tctttttcaa 360  
gtggcaacaa aagttgtggt atattgaaga tgccttcaat ccaattttcc gggc 414

<210> 1821

<211> 425

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-G9

<400> 1821

cgtcgggat tttaggaatg aatgaatggt tccatcgctg ccgtcggtgt ttttgtttcc 60  
agaccgactt ggaaacgaca tcgatcatat atagtgtggt acaatggggc ttcaatgata 120

ggtctgacgc tacaaagtga aagtctgctt gtgtttcccc tgggcgaccg gaaatgaacc 180  
 caaattacaa ggtagtata ttgaaagaat ggccgtcagt actttacctg tgatgagaac 240  
 atttttgcct gctttcacag tttatatgac tgtcagagtg atttgtttta tttgcgtctg 300  
 agaatatatt ttactattgg aaaacaactt tttccctagt acatatctca attgtgtttt 360  
 tgtaggggtt gctattcagg acttgtaaatt tctttacttc ggtcaccagc tatctattta 420  
 acaag 425

<210> 1822  
 <211> 313  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-035-Q1-E1-H1  
 <400> 1822

acgcgtgttg acttctgtgg agaaggatca aactttgtcc aaaggagcgg agatgcatca 60  
 agaagagtct gcataaagga ctatTTTTgt atagttgcc tcatggacgg tttgtgtgga 120  
 aagttgtgat tgtgtagaga gtgtgtttgt gagttgtgtg tggattgtt gttttacgtc 180  
 tttgtgagt accactcgta ngagtgtgat gaatcctcac aaagatgata gaagacaata 240  
 aaacgatgtt gttttggtat aaaaaaaaa aaaaaaaaa aaaaaaaaa aaaaaaaaa 300  
 aaaaattttt ttt 313

<210> 1823  
 <211> 399  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-035-Q1-E1-H11  
 <400> 1823

cgtaccaaag cgaatgataa gattcgTTTT ctgttttcac atgtcgacgt ggaagcttac 60  
 ggagagagcg ttttacacag tacacatgta cgtgatttga agagcgatcg agtgaaatat 120  
 atgccatgtt ctggctgaat ctttgcggtt ggatcatttac cagctaccaa gtttctagac 180  
 aatcagttgg cgttggatga tgatggatat attagaacgg ttccatgaag cagcacaacc 240

aacgttgctg gtgtttttgc ttgtggcgat gttcaagata acaaattggag acaagctgtt 300  
 acggctgcat gtactggatg tatggctgca ttggcagctg aacattactt gcaaactg 360  
 gacaacggac atctcgatgc atgaatatct cctctttgt 399

<210> 1824  
 <211> 291  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-035-Q1-E1-H12  
 <400> 1824

cgtgttgcca agcgttgctg ttatcgtcta tggcgggtatt tgaaagtgat atagttggtc 60  
 ctgcaattca ctttacgaaa aagtataatt caaggangcg ctacaaggag tgcatttcgt 120  
 gctttaatgc ttcgggtggt aaaccagggt ggttcttttg acataagccg aaaattactc 180  
 gcaacgggct atacgactga taagggtatg aagaccaata atggtgctgt tcgagaaagt 240  
 gacttttacg agagagtctt ttcaagaata gcttcaaac gctctgactt t 291

<210> 1825  
 <211> 262  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-035-Q1-E1-H2  
 <400> 1825

aaaaaaagat aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaataaagg 60  
 aaaaaatata aaagattaaa aaattaaagg ttgggtaaaa agtttttaaat gtttatagag 120  
 tgtatatgta aatgtatatg gtattgatgg tttatctttt tgattgtgaa gacgcggttg 180  
 aatatgatga ttcccgagtt aaatgatatg ctacattaaa aagatgttgt attggtaaaa 240  
 aaggttacat tttttttttt ta 262

<210> 1826  
 <211> 352  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations



<223> Clone ID: LIB190-035-Q1-E1-H3

<400> 1826

agggtggttc gtggatgacc tttctactca tacttgccctt tgttgcggtt tatttttttg 60  
gcgaacgagg canaaagaag aaaagtccga aatatagttg ggtaccgcct accttaaacc 120  
acctatcaga gtttccagcg aattcgaaca acagtcgttg tacagttaga acttgtaaag 180  
aagagtgtaa attggtactt tgtgttcgtt ccgtaagctg ctcttttttac caaataaata 240  
cgacaagtat caacctgttt attaagattt gaagatggga aagggtaaaa tagctgcaca 300  
gtgtggacac gcaacactcg gtgcctatca agatacactt cggaccaacc ct 352

<210> 1827

<211> 193

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-H4

<400> 1827

acctttctgc tcataactgc ctttgttgcg ggctattttt tgggcgaacg atgcataaag 60  
gagaaaagtc tgatatatag ttgggtaccg cctaggtgtg gcacctatca tacgttccag 120  
cacagtcaga gacaagttag cagagttgtg taggttctga agtgggagtg gagagagtg 180  
cattgagtcc aat 193

<210> 1828

<211> 405

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-H5

<400> 1828

aggagaattt tgtggtccac gatatacaaa ctgacactgg taaacttgat agaaacgcag 60  
ttaaaggcca tcaagtctca gtacgtcgtg aatgtcatgg aaagcggacc tggctttgtt 120  
gtggaggtgt tgtttgcctc tagtagactt ggatgcaaatt tttctgttgg ttgcaagtgc 180  
gaaaaccttt ggcatatttc tccaatagag tgggagttga agagtatttt tggccaatgt 240  
gaacgagtgt ttgcattgaa ggaacagttg gatacgtttg taagcgagac ttgtccgctt 300

ttagatggca tgaaagcagt gcgtcaattt ttagcgaaaa tggaacccgt tcagactatt 360  
 taacatcaac gttgcaagtg tcctatTTTT ggatgccttg tggat 405

<210> 1829  
 <211> 402  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-H6

<400> 1829

atcgaattta gctgttggat aaaattcgga acaaattatc ctcgattaga ttacgcctac 60  
 gtagatatga ctgacgacgg tagttggatg ttgtacctca ttcaagtttc tgtttcatct 120  
 tttccagctc ataacacaga ctcagcacag ttggaacggt tgtttaagaa aactggtgga 180  
 actgttcaac ttgcttcgtt actaaattcg ttctttgctg aggtttttga agtctcgcct 240  
 gtgtacgatg tcagggagaa gatagtgaac tttgaggtga cagactctca tggcatgtct 300  
 tttcgagacc gaatatctat tttgtatgtg actccattga caagagagga cgcgaaagca 360  
 gacagcgctc ctgaatttgt agagtttcct gcttttgaca ac 402

<210> 1830  
 <211> 381  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-H8

<400> 1830

cccacgcgtc cgcgacgcg tgggttcaaa gagtgacgtg gaaagtagtg tgaaaagtga 60  
 accaacgagc agcaaagtgc aacaaccaga aaagcagtca actccgccct cgtcacctcc 120  
 caagccacct cagcaagttg ttgagacaag taagcagagt tttgtaggtt ctgaagtggg 180  
 agtaaagaga gtggcaatga cacgaatgag gcgtcgtatt gcggaacgac taaaagaagc 240  
 gcagaatact gccgctatgc ttacgacatt taatgaagta gatatgtctg ctttgatgga 300  
 gttgagaaat agttataagg aagcctttga aaagaagcat ggcattcgtt taggctttat 360  
 gtccgcattt accaaagcag c 381

<210> 1831

<211> 419  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-A1

<400> 1831

agcaagtttc catcagacat gttcaagaaa atgagcacgt tgggtgttact tgtagcttt 60  
ctatgcggta tattagccat tgtgcatggt gcgccaccag tgatggcatc accaccaggc 120  
ttccaacagg aaccaactgt tcatgttcct gaaaactatg gtagcaacta tgactcagga 180  
aatggacatt ccatcaatta tatgttacag ccacatattc cattcattcc tattggtagt 240  
ccttctatcg ccaactctcc ttcttatgca tcggatcaat atgctcaagc tttgtctgct 300  
gccaacgcc tttcattcct ctgcggtaat gcaacggcac aaatcaacgc aactgttcaa 360  
tgtcagcttg cgttctctaa ttccactgca actgcttctg gtcttggatt ggtagaaac 419

<210> 1832  
<211> 385  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-A4

<400> 1832

cttgaacca aactaaagaa gggcaacaga aaccaccgga gctagaaggc cggaaccaac 60  
ggtaccgccc caattaacct ggaaaatgtg gtgcaacctt aaaaaacttg cgtccccaac 120  
cacaattgtg ggcctaattg gtaaaatttc caacgggtatt tgggttcaca ctgttcaagc 180  
aaaagacgaa tattgtgcat acaagtcttc ctttcaagta aaccaccacg gcatagcttc 240  
ctattgcaag tatatcatgg ctgtagcagc tattggtttg gttatcagct tcttcgagtt 300  
ttgggatgca ttctcggaa ttttcttcaa gtggcaacaa aagttgtggt atattgaatc 360  
tgctatcaac gtgtttttct gggct 385

<210> 1833  
<211> 376  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-A6

<400> 1833

agttaccaat ggtgtttcga atgtcttttg tgcaacttgg agtacggttt ctattacatt 60  
caggaaccaa ctctactcc ctattatccc agctattcca gttcttatcc gatgtacagc 120  
agtagctatt ccagctacag cagttacca tcttagacaa ccagttctta tagctcataa 180  
taagaaagga tgctgaatgg ttggtcaggc gaaggatgcc ttagaatatt ttcgttttgt 240  
ttgttcggtg aattctaaat gaataaaggc aatatagttg tcaggaaaat gtagacgtta 300  
aaaaagaaac tggagttatc cctgacatta aagtatacaa tggaattact ccgattcctg 360  
gtaggaaagg atgaaa 376

<210> 1834

<211> 410

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-036-Q1-E1-A7

<400> 1834

cccacgcgtc cgcccacgcg tccgagaaat tgattgcatt ttgttcgaag agtgatggcg 60  
attcttcttt gatagtatct cttgttcaac atataggagg aaactttgaa aagatggggtt 120  
gggaagaatc tcaaatagaa gaattgcttt ccacgcttta tgaaaagaag cctttattgg 180  
catccgtact aggcacgtt agtgggtttc catctctgtg caatcgttat ctttcacagt 240  
tggaagaat agcttctcca gagcctgttg acctagctat cctacctttg atgaagactt 300  
gggtgttgga aggangagaa gatgaaattt ccaagagatt gatagctatt ggtcgtactt 360  
ggctatttgc cgcactttgt gcgcgtttgt tggagaagaa tagaattatg 410

<210> 1835

<211> 339

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-036-Q1-E1-A8

<400> 1835

gaaatgttca agttgatgcc agccaagcac cacagttact attatacctt gtttctattg 60

ggatgcatag gcacgttgct attatctgct gcaaattggac aatccgtaaa aacagaacag 120  
 agtgggactc aacaagcaaa gaatcaaacc gctgttcctc ctcggtccca gtggaaaaga 180  
 gctccttgga cgatagtaga cagcttctac gctggaattg cactgtttta tttgatattc 240  
 tttgctattg gtacttggag aaatgtaaca ttgtccaagc ggatagggtca actgttgagt 300  
 tcctgtgcgt cntctcagtt tgcttggatt ggtacagac 339

<210> 1836  
 <211> 450  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-B11

<400> 1836

cacgcgaccg gtattactga tgccttggtt ttagttttac caggcttata ctttggttatt 60  
 actggtaatc gtatattctg tagacgctcg gacttgaatg aaacggaagc attggagtcc 120  
 tgcttttcgt ttatgaagat atgccccacg tacaagtcgt tggagattct tttggaaggc 180  
 gagcaaattt atgtagaaga actcgtgcct attgtatttc gtttcgttga agactttctt 240  
 cattttcttt ttgacaattg gaaaaccgta agttacggct ctccctcgaa gaaggaccta 300  
 cagtctgggt tgtggagaga gcaagcgcag aactggattc gttcttttcg tcagctgtac 360  
 acagaagtgg agttatttat gaagatggta aatacgatat ccacttgtga tcgatcgctc 420  
 gtaaacattt taccatcgcc agttgttttc 450

<210> 1837  
 <211> 229  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-B2

<400> 1837

catgcaacta ggtagagcaa ccgggtgatt aatgaggtgt gataaattgg aggatcatga 60  
 tggcacggaa gaatgttata agtgggtgaga gtagaagcca taacggatgt aataccggga 120  
 atctgatagg aggacagctt cattggagct gataaaaggc cgtgtcagga gaagtcgca 180  
 ttggtgacga ttggtccacg tccaggggaag tacgaccag caatgagga 229

<210> 1838  
 <211> 375  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-036-Q1-E1-B3  
  
 <400> 1838

aagttgagcc ttgtggtggt gatccccgga attaaccaac ttattggaaa tccgccggcc 60  
 ttaaaaaaca taactgcaat tattgaaaag cctgacataa aatggataac taggacaaat 120  
 ctcattactt gtctgaattc tgcagaagga aatgttacgg ttgacttgct ccggcagtgt 180  
 accttgaagg atatatatttc attgaagctt ctgcacaata actttaagtt ggcgtgtttt 240  
 aatgatgcct tgttttttagt tttaccaggc ttatcctttg ttattactgg taatcgtata 300  
 ttctgtagac gctcggactt gaatgaaacg gaagcattgg agtcctgctt ttcgtttatg 360  
 aagatatgcc ccacg 375

<210> 1839  
 <211> 353  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-036-Q1-E1-B4  
  
 <400> 1839

ccggattacc aaaccagaaa atgggaatta aaaggtaaaa accaggaacg gttaacaaaa 60  
 aaaggaattt aaagaaaaaa attgtaaggc ggcttcatac taaaaatccg aacggattat 120  
 aacaaaattc agaaaaaagg aaaattaaga taaaaccgt actgaaaacc gaccaggtta 180  
 cccaaggata aaggaaaccc aaattaaggt gaaataatgg acaataagga actaggcaaa 240  
 aggatatggt atctgcggta gaacatatga atgaagcagc accgactgtt aagcacaaca 300  
 cagcactctg cataaaagag aaaatgtaca gtatagactg tgcggcctgc caa 353

<210> 1840  
 <211> 431  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-036-Q1-E1-B5

<400> 1840

gagaaagaag aaaaaatgag cgatgcatcc gtcgagcaag tacaacagag actgcacgag 60  
ttgttagaaa acctggatac gttggaaaga caagtttccc aactagagta cgacagttgc 120  
cgcaaggaaa ccaaccaaga cgtgcagcaa ctcttaccac aatgcaaata cttggaagag 180  
tatttggttac aactagctct acaggtggac gggttacaag taagagccta gttgccttgg 240  
tatatactcg tgtgatacat ttggtcctag atttctagag aaagtgcgca aaaggctttt 300  
cgtgagaaga gacaagaaga ggcaaaggaa attaccaaac tattgtctca acgaaagaaa 360  
accaaccaac gagtgcaact attgctgaaa cgattggata ctgtagtagc caacttgtca 420  
taactctgaa a 431

<210> 1841

<211> 405

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-B6

<400> 1841

gacccacgca tccaggcaca catcggacca cacttcatgc aacagcgtca gcggatacat 60  
cagatacaga agcagattct acagcatttg gaaaaggatg aactcgtca actttgtctc 120  
gtcttcgttt cttacctgtc agaataccca gatgaagaca tcacgtacac aagtattgat 180  
gccatacaga catgtagtga gtagctctaa gtctctgaga ctttcgttcc aaatttagga 240  
tatagacacg tggagtcgtc gcaagtttct tctcacttca cttggattcg tgtcatctgc 300  
gctgttccgt tattctcaag attcttgggc ttccagagac tatgcatgtg ttggatattt 360  
gcaccgaggt gacaaggttg acatagacaa cgctattatc agagc 405

<210> 1842

<211> 443

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-C10

<400> 1842

ccacgcgtac ggaagaagac ttggaacaag ttgtccctct cattgcccgc gtcactactg 60

ctactttata aagcatagga aaaattatat tgcaagattg ttcattgtcca ataataagag 120  
aatgccaaaa agaacagata ctttggcttt atttgatgta gatggaactc taacaccgtc 180  
tcgatgtcaa gcatctcgcg aaatgttga gtttttaaga aagttgcaa acgaggtata 240  
cactgttata gtgggtggct ccgacttggc aaaacaagaa gaacagctgg gtccactat 300  
tttagaggat ttcgattatg tgttttccga aaatggcttc gtggcatatg aaaatggaaa 360  
attgatccac acgcaaaact tggcaaaaca cttgggagag gagaaactga aaaacgtgat 420  
caatagttgt ttacattata ttg 443

<210> 1843  
<211> 416  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-036-Q1-E1-C3  
<400> 1843

acgcgtccag gtagcaactg cgcgctcggt atcatacaac tacaactgtc catagagtac 60  
cagcagacga agaaaaggaa tctgtcggtt taaagcctaa acgtttgcat cagcctcttg 120  
gagtttatcc acaaggaacc aatctggaag aattgagaga aaattggcaa attgacccta 180  
tggaacttat ctcgaaagta cctccgatag tagtcaatgg ctatgtcata ccgtgtaatg 240  
gaggccgagg tccattagga catccaatag aatatattcg tttggaagca ccttatcctt 300  
caacttgcaa atattgtggt ttgcgatata tcaacaaaga cacttttgaa aagtggaaaa 360  
aagaaaataa cgaataataa aatggaaaga ttttaaaaaa aaaaaagcta ccgatac 416

<210> 1844  
<211> 428  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-036-Q1-E1-C6  
<400> 1844

accacgcgt ccggttggag gtcctgatta tcgtcgacgc caaaggatcat cttttaggctc 60  
gccttgcttc tatagtagcc aaggaaatat taagtggcca aaagatcgtc gtcgtgcgtt 120  
gcgaagaact gaatatttct ggagaacatc atcgacacaa gctcaagttc aagtcttatt 180



tgagaaagag gatgaacacg aatccttccc gcggccctta tcatcatcgc tctccttccc 240  
 aaatattctt caaagcagtg agaggaatgg tgcctagaag aacagcacgt ggtaccgctg 300  
 cgttgagtcg attaaaggtg ttcgaaggtg tacctccgcc gtatgacaag atgaagcgaa 360  
 tggtagttcc tcaagcttta cgtgtggtgc gattgccacc agataggaaa tacactcaat 420  
 tgggcact 428

<210> 1845  
 <211> 119  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-C7

<400> 1845

accacgcat ccagtcaagc gtcaggttat atggcaacat caaagtttat ggttcaaggt 60  
 agcaggtatg agtggatgat ttgatattag tttgggagat attaagtggg atgagatat 119

<210> 1846  
 <211> 82  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-C8

<400> 1846

gatttggtaa cattcaagtt tatgggtcac gggtgcatgt tttagtgtaa tattctctgt 60  
 tagttttgga tcgtttgttt tg 82

<210> 1847  
 <211> 99  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-C9

<400> 1847

atgctctttc ttcattgctt ttcttattca gggtttggta tctcgtcttc ttgtcttgtc 60  
 tgttctcctt ttctggctta tgtctttttg gctcccatt 99

<210> 1848

<211> 259  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-036-Q1-E1-D1  
  
 <400> 1848  
  
 acgtcagact caattatatg aaattcttag acatccaatt cctaaaccaa ctccaaagga 60  
 aacttaatta cctccaaatt acggaataac cttttcggtg ttcatttgaa acctaatacct 120  
 gttaaaccac aagtttttac caaaaattta gccaatcctt tgaacaaaag ttttttgaac 180  
 caccttaaac ctctcccaag ggcataccaag cgtctcccggt tggcccctta taagacaaaa 240  
 attcccccca gaaaattat 259

<210> 1849  
 <211> 466  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-036-Q1-E1-D10  
  
 <400> 1849  
  
 cacgcgtccg gtagtttttg ggtgacgttg tattgttatc catgaagcaa ccccgtcgag 60  
 tttttcttca acatagttat gtttttaggtg gaactcgtgc ctttttagtg atatttgtgt 120  
 caaagggagg tttagcttca gatataaaaa atgttgcagc caatagtttc tgtataccac 180  
 aaagacgaga gggagtcgca tatectggaa gagcaaacca aaaaggatta tcagaaggtc 240  
 ttatgcagtg gaaacaaggg gctgcaggac ctttttttac tcttcagta ctcacatgtg 300  
 gaagacgcgc agaatacttc ggccggtttct gttttggact caaagtcagg tttcggttct 360  
 tgtacatacct gcagaaaaaa gtctctctgc cgtctctca ctgcaaccag tagcaatatg 420  
 acttctgctc gtctaagtag tgatattgaa gagtcataca accaaa 466

<210> 1850  
 <211> 478  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-036-Q1-E1-D12  
  
 <400> 1850

gggtgcccc acgcgtccgg aagtatctcc tgatttctat gcctgggtat ttcctaaata 60  
 tgatcacgtg ggagtaggaa caggaacagt tatcgatcgt cttccatta agaaatatca 120  
 ggcagcaata cgtacaagag cagcatcgaa actcagtggt ggtcatatta ttaaagtaga 180  
 ggcacatccg attcctgaac atcctcgacc aagaagagta gttggaagag ttgctctcgt 240  
 cggtgatgct gcaggatatg ttacaaaatg ttccggtgaa ggtatttact ttgcagcgaa 300  
 atcgggacgt atgtgtgcag aagctattgc ggagatttct ttacaaggag aaagaattcc 360  
 ttccgaatcc gaactgaagg cgacttatct gaagagatgg gatagcaagt attggtcgac 420  
 ttacaaagta ttggatgtat tacaagcagt atttatcgca ataatttgc tcgggaag 478

<210> 1851  
 <211> 435  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-036-Q1-E1-D2  
 <400> 1851

accacgcgtc cgcatgatt cgatgcggca caagacagtt gtggtggcaa ctgcgcgtc 60  
 gttatcatat aactactact gtccatagag tagcaggaga agaagaaaag gaatcggtcg 120  
 gtataaagcc caaacgtttg catcagcctc ttggagttta tccacaagga accaatctgg 180  
 aagaagtgag agaaaagtgg caaagtgacg ctatggaact tatctcgaaa gtacctccga 240  
 tagtagtcga tggctatgtc atagcgtgta atggaggcgg tgggccatta ggacatccaa 300  
 tagaatatat tcgtttggaa gcaccttatt cttcaacttg caaatattgt ggtttgcgat 360  
 atatcaacaa agacactttt gaaaagtgga aaaaggaaaa taacgaataa taaaatggaa 420  
 agatttttaa aataa 435

<210> 1852  
 <211> 350  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-036-Q1-E1-D3  
 <400> 1852

acgcgtcgag cgagtgtgaa cgatgcttga gcggcagaaa attcatttgt tgtcaccact 60

gtacccccct tatctttcag ttggttcagt ccatgttttc ggaagcgacc aagaaaaggg 120  
 ttccgtctgt tccgaacca tttatttgcc tcaagctcat caaatttttt cgcgaagtac 180  
 tattcccgaa accctaggaa aattccttgc gcgttgactc cattggaatt ttcacgattt 240  
 tagctccgat agtcgtcgat tgatacgtca tagcgtgtaa tggacgcagt ggtccattat 300  
 gtgcatccat actattttatt cttttgcgtg caactttctcc ttcaactttc 350

<210> 1853  
 <211> 206  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-036-Q1-E1-D4

<400> 1853

gtttagtgtgta aactgccta ccattgttgt ccagaaccaa agcctgaaaa tggaagccat 60  
 tcaagaattg tttcaatata cattgtatac tattgctaag aagaatctaa tggaaaccaa 120  
 agcgtatttg agcaagtttt ctttgtttcg tccatgtntt ggaggaatg actgtgagca 180  
 ttagaaagaa gaagacagca agaaac 206

<210> 1854  
 <211> 300  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-D5

<400> 1854

gttgctgctg cttttgttaa tgagcttccg agagaactta tcttgagaat tccatttatc 60  
 ttggctcagg tgttcactat gccatcaaaa agttagagtg ttggccaata aaatcgtaca 120  
 accattttat tctgggaaac cacagctttt gggttctggg ggtactatgc tcgctgggtca 180  
 ggaacttaac tgaattcacg gaagggatga catctactta ttccaatcat cgatatggct 240  
 tactgattcc aaaacgtcca ctctatcatg ggtggaatcc aacttacaaa acctcttttt 300

<210> 1855  
 <211> 416  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
<223> Clone ID: LIB190-036-Q1-E1-D6

<400> 1855

attcgcccgga tcgacccacg cgaactaccc acgcngttct cgagcgcacg gtgctcactc 60  
cagttatggt cnggtatccn atttgatgt tcgnagctgc tnggcttttt gatgcaanaa 120  
ggaattggaa gtatttcgna aaaggcattg taagaaccca aatgagacct taatttagct 180  
atcttgggaa ggagccaata gtatccgaat aaaatacaac gtcacccaga catttattat 240  
caaagagtgg atgaaatgat tatcggaggt ggcagtgtgt atacttttct tcgagtatta 300  
tattccatgc cyattggaga ctccatttat gacgagcctg gatcacattt ggtctaaaat 360  
aataagacag aagccaaaga aagaaacgta tagatacact tttccagtcg attttg 416

<210> 1856

<211> 158

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-D7

<400> 1856

gtccgatatc tatttattaa cgccaatatt tacggatatc attacgatta tatatcgtct 60  
tattcttatt tatataaaat accatctata tatatactat gttgattatt cttctcctag 120  
atcatttttt tccgggtaac taaatctttt gttttctc 158

<210> 1857

<211> 384

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-D8

<400> 1857

agaggacatg gaaggaaggc gcagtatcct aagcaagtgt ggcaccctt tggaggcaag 60  
tttctcatc cgagggattg gaagaagcac acgaatatag ctacccttat tatggcactc 120  
actgtgatcc ctattattta ctatgccgag aagcactatg tctattacca gtatccttat 180  
cataagattc cttggaggcc caatttgaaa acttttgatg aagatttgga ggaacgaaga 240

aaggccaaga tggagaggaa aagtgttgca agcgatggtg atgaacagct cgattcgtag 300  
aacttgggaa aaaaggcatt ccttgtttgt tgaagtgtt tcgataaatg cacttgtcaa 360  
ctagttcaag taaatcctag tttt 384

<210> 1858  
<211> 456  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-036-Q1-E1-D9  
<400> 1858

ccacgcgtcc gccaacgcgt ccgcaaagag aggggaattcc cggattccaa cccgtatata 60  
tgtatgatga aggttccaca attgactgga ttccttgccg acgtaaactt acgtgcagtc 120  
atccgggtat caagttccac tatggaccgc acaattggta caaccacgat gtatcgatac 180  
tagaagttga tggaaacttt gacaagttgg aggaacttat ttacatcgag tcgcatctta 240  
ataatacttc cagcaaattt tatggggaaa taactcaaca actcttgagg aacgcttctg 300  
ctccaggatc taataacgga actggactct tccaagttct catagcctta aagataagac 360  
aactttatga agaacttaca ggaaagaata tagctcctgt tctcgtttag ttacaacggt 420  
attctcttcc aattatgtag taaacttcgt agtcgt 456

<210> 1859  
<211> 392  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-036-Q1-E1-E1  
<400> 1859

cacgcgtcca atggaatgat ggatgatatt atagaagaga agagaaacta aaagaaggcc 60  
ctggaacaag gtactttggg ggaaatagat ggcggcgatg tatccaaagc atcgtttccg 120  
atattggata ggaaagggtt ccaagacgcg agtaaattgt tgaaaattga cggacaagga 180  
catgtagtat tccataagaa gcacaagttg atggccaaaa attgcgtagt tcacggcaac 240  
ggtgcgcaag aaaatgccaa aatacgctaa agcagctggg caatcatttc aaagccatcg 300  
atgaggacaa ggaatgagat atcttttagct cgctatatgt agagaaagag agagagagat 360

gcaagaaaac ttggataaaa atacaatcat gt

392

<210> 1860  
<211> 307  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-036-Q1-E1-E10  
  
<400> 1860

cacgcgtacg ccaacgcgtc cgcccacgcg tccgcccacg cgtcagagag ctttgaaggt 60  
ctcatggata atgtgtgaaa gcgttgaaat cagtgcctatg tttatgatgg tcgatatgat 120  
ggcaagggttg tgggtgggttc gtgggtgtggg aaacatagta tttccctgcc agcaattggc 180  
agttactatc atcgagagca cctaactctg atctccgccc aagttagttt tattctacta 240  
cacctttctg ggcgagggga taatgacgga ttgtttgagg ttggttgcca tgttatgagg 300  
gacattg 307

<210> 1861  
<211> 357  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-036-Q1-E1-E3  
  
<400> 1861

atatataaag ctaacgttca aataaactgc ctttaaatac ttttaaaagg acacaactta 60  
ataattaagt ttcaacctga tagaaatcca gaacaacggg aagaaactga aagaaacttt 120  
aaaagagtca aagaagctta tgatttatta aggcagcgaa aggagaacca gtttgaaagg 180  
acggaatatc gttctggaac ttcttctcgg tccagctacc gtcaggactc taggaaaact 240  
caaactcgta acgcctatta tactggacag cattattcag gtttcagcag gactagcaat 300  
cggtctacga agcctcctcg tatgttggat attcatgggt tgcaaattct cgtcttt 357

<210> 1862  
<211> 386  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-036-Q1-E1-E4

<400> 1862

acgcgtccag tgaagatgc aatctagcca tgctccaaat ggtatgctga tagaacgtct 60  
tctggagttg aacataataa tgaagtttca tctgggtttg cgatccaaga gacaacggga 120  
acgattcgtt ggagactctt taaggagagt cagctcgcgc ttatgatata ttattgcagc 180  
gttaggagaa ccagtttgaa aggacggaat atcgttcttg aacttcttct ctgtccaact 240  
accgtcagga ctctatgaaa actcaaactc gtaacgccta ttatactgga cagcattatt 300  
caggtttcag catgactagc aatcgggtcta cgaggcctcc tcgtatgttg gatattcatg 360  
gtttgcaaata tctcgtcttt actcta 386

<210> 1863

<211> 404

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-E6

<400> 1863

accacgcgt ccgcggacgc gtgggcggac gcgtggggca agcgtgaacc gtgagggtag 60  
ttcatcatgg ttgagacaaa acttcaagat ggtgttagtg cttcgctttg gactgttcgt 120  
ctcttctctt acacagttat tttagcattc tctgtcacta tcattggctt ggatggacgt 180  
taagcagaca acatatggga cgatagctta ttctatgatg ggaagtacat taacttttgt 240  
gcttattctg cctcttctgt tgtaaaacga ggggaccatg gagcgtgtaa atatgtcatg 300  
gcgttggtgt ctaatagttt gattctagtc ttttcttgg ggctttatac attttagat 360  
gcgttgatc ctattcttaa caaggtttgg tttactgaat tggg 404

<210> 1864

<211> 352

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-E7

<400> 1864

cgacccacgc atccaccac gcgtccgcgg acgcgtgggc ggacgcgtgg ggcaagcgtg 60  
aatcactggg ggtagttcat cagtgggtga gacgaaaact tcatgatggt gttagtgcct 120



ctctgtgggc tgttcgtctc ttcattctaga taattaattt agcattctct gtcactatca 180  
 ttggattgga tggacgttca gcagacaaca tatcggacga gagcttaatc tatgattgga 240  
 aatatattaa cttttgtgct tattctgcct cttctgttgt agatggaggg gactatggaa 300  
 cgtgtacata tgtcatggcg ttggtgtcta atggtatgat tctagtcctt tt 352

<210> 1865  
 <211> 469  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-036-Q1-E1-E9  
 <400> 1865

gggtgcccc acgcgtccgc caacgcgtcc gccacgcgt ccccccacgc gtccggagct 60  
 ttgaggtctc tggtagtgtt gaagcgttga atcaagctat tttatgtact cgatatgatg 120  
 gcaaagtgtt ggtgggttcg tggtttgga aacagagtat ttccctgcca gcaattggaa 180  
 gttattatca tcgaagtcac ctaactctga tctcctccca agttagtttt attccaccac 240  
 atctttctgg gcgatgggat aagaagcgaa ggtttgaggt tgcttgccat tttattagga 300  
 aattgcaacc atcacgttta atcagtaaag ttgttaaaat agacgaggct agtgaagtgt 360  
 atcgacaaat ggatgaaaac cccgatcatt gtgttcagat attgttttct tatgagcata 420  
 caacataatg ccatttgtgt ttatttctca atcatatcta ttctactcc 469

<210> 1866  
 <211> 446  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-036-Q1-E1-F10  
 <400> 1866

ccacgcgtcc gcagaagcta agcgccctca ggcttggtta gtactgaggt gagggatcac .60  
 tcgggaaccc caagtgccgc agcgttgaaa atttttcaag tatttcgca gtaataatat 120  
 gtgttgaaat atttttctac taagaagttc tttttgcttg gcgctgtttg aaaataacgg 180  
 aatgattctt gtctgacca gtcgataggg tcaagggatg actgtaagag gtatccaata 240  
 acttgatatt tccatcgtat gacaagaggc ttgttgga aaagcagcgg ataacttttg 300

cgccgattgc gtcgtgctta agttgctcac tttctgctg accaagaggt ttcaaacct 360  
 gcagtgaag gagaaatata ttctcactga ggaacttgga ctgagcgact agggcaagat 420  
 gcgtgttgtt tgggttgcgg ttttgt 446

<210> 1867  
 <211> 266  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-036-Q1-E1-F11  
 <400> 1867

cacgcgtacy ctatgactca tcgcactcag gcgtggtaat tactgaagtg tatggatcac 60  
 tcaggaacca caagtgccgg aacgttgtgt atttcacacg tatttcacga gtactgggag 120  
 ttgtggacgg attttacaat aagtatgttc ggtatgcgtg gcgctagtat gaagataagg 180  
 gtgtgatgca tgtcttgcta agtcaatgcg gtcaagggat gactggtaga agtatccatg 240  
 aagctataat tcatatgata tgagac 266

<210> 1868  
 <211> 432  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-036-Q1-E1-F2  
 <400> 1868

acgcgtccag gttacttcat tgaattctga aggctgccgt aacttacagc agtctttgtt 60  
 taccatggag agcgagacag tgaaaaatga taagctagct aaactacaaa gaatggctgt 120  
 gaatgttcga actggtggga aaggtaccgt tcgaaggaag aagaaggcag ttcacaaggg 180  
 cacaccgacg gatgataaac gactgcaaag cactttgaag cggcttggtt taaaccaa 240  
 acctggaatc gaggagggtca atattttcaa agacaacggg cagggtgatca actttactac 300  
 ccccaaagtt caagcagcca tcggagcaaa cacttatgtg gtatcaggcc aaggggaaac 360  
 aaagtcnctt caggagctgc ttccaaatgt actcaatcag ttgggttcgg acaatctagc 420  
 tcaaatgcgc tc 432

<210> 1869  
 <211> 404  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-F3

<400> 1869

gaacggtcct tccaacggca attcaaaaat tggtttcaat gaacgttcct cgcgcccaaa 60  
 aggtaataaa ccttacaaag gaattccctt tggacgggaa cccaatgaat ttgcctttgg 120  
 ttacaaaact tggcagtcgt tcttctcgga aaacatcgaa tatgacgaat aatagtactg 180  
 gtggagacta tggcggtcgc cgcattcatta ttactgcaac tggaaagaga cgaggtggtc 240  
 gatggagacg taaaaacttt cctgtgaata atgaacgcat gatggattaa gaagaagaca 300  
 cacaagtagt tgataacatt ttctttataa aacttttctt tgttggata aaaaaaaagt 360  
 tgcagagaaa aaaaaaaaaa aaaaaaaaag aaaaaaaga aaaa 404

<210> 1870  
 <211> 426  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-F5

<400> 1870

actaatattat ttggatgaga atcgagagcc atgtaaaggc cgcacaaagt cggatactat 60  
 tgagaaagca ttaggcataa aaagaggcca agtttttcgt tggagcgatg tttattggga 120  
 gcgaatcacg gagttgggac tttttgatta tggttcgtgca gagttggagc ttcgtgatga 180  
 ttcttcagta caagttgttc ttcgtgtgcy tgaacgtcct tatagtcgtt tggaacctgg 240  
 aataggatat ggctcaggtg aattatttgg cgaattgtca tttcaagata acaacttatt 300  
 tggacgcaat cagtatctcc aatttgactt tcagaagaga caatttcaac attcagtatt 360  
 atcttttagag tttgaggatc ctcgtgtagg acagttattt gggtatcgtc tcaaagtata 420  
 tcgtga 426

<210> 1871  
 <211> 433  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-036-Q1-E1-F6

<400> 1871

agctgggtgg agtagcgaaa caagagaagg gaagtaaaag gtaagaaaga ggaaaggttt 60  
 acgagagaag gaagtagaaa gaagagagtg taaggcggcg tcataataga aatccgaaag 120  
 gagtagaaga aaagagagag aagaaagaaa agaagagaaa agccgtactg aagaccgaca 180  
 caggtactcg aggagaaagg agacccaaat taaggtggat agtcgagagg aaaaaagccc 240  
 agaagccaag ataaggtatc aaagtaaaga aagaaggaaa aggagaagaa gagagggtag 300  
 gcttagaagc agcanaccag agaggaaagc gttaaagcat gaaagaaaag aaatccgaaa 360  
 aagaagagaa aaaggttaaga aagaggaccg aatcagggta agaggtanan gagcaagaag 420  
 agaagagaga atg 433

<210> 1872  
 <211> 338  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-F7

<400> 1872

gacccacgca tccaggcaat tgcagcaatt tcggctaatt gttgtggaac aagataacat 60  
 gtcgacccag aacgcagtag gctctgcaa cttgagaagg tgagactagg ggtactttat 120  
 gattgtctac taagtgaat aaggagaaat acggcttcac gcagttccgg tttaactagt 180  
 tctggtacga gcacctcgac gaagtatttt tccgcgcgac tgtatgagcg acgatccaac 240  
 cggtttgaga gtgttggttc tgtgtgcttt tgttggttca tttggctgat ttcgtttacg 300  
 ggatcgctac tgcgttatgc ttcatacctt tgtcgaaa 338

<210> 1873  
 <211> 389  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-G1

<400> 1873

accaagcgtc cgcgtgaggg tagttcatca tgggtgagac aaaacttcaa gatgggtgta 60  
 gtgcttctct ttggactggt cgtctcttcc tctacacagt tatttttagca ttctctgcc 120  
 ctatcattgg cttggatgga cgtaaagcag acaacatatg gaacgacagc ttattctatg 180  
 atgggaagta cattaacttt tgtgcttatt ctgcctcttc tgttgtagaa ggaggggacc 240  
 atggagcgtg taaatatgtc atggcggttg cgtctataag tttgattcta gtctttttct 300  
 tgtggctttt tacatttgta gatgcgttgt atcctattct taccaagttt tggtttattg 360  
 aattgggtat caacgtgttt caaacaatg 389

<210> 1874  
 <211> 438  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-036-Q1-E1-G10  
 <400> 1874

gccaacgcgt ccgagtcaat accgtcgttg ttcttattgc tacttgtagt ggcagaatat 60  
 ccatctgttg gtggtgccgg tggttgctgt cctcgtctgc tggatgaagag tttcttcgcc 120  
 gggcttttat tctcgtcgtc atcgatagca agatatttgg aaacgagttc ttgtacattt 180  
 gggctctatcc agtggctcgt attttctttt gtcgtgttg agtaggcaac taccgatgat 240  
 gatgaaatag cagtcttgtc gtcggaatag gaacagttgt tgctagcggg aaccaaggaa 300  
 gcaacgcttt ttgaatgagt tggttggtgg tggttgactt gacgaccata gtcggtttcc 360  
 caaaacactc gagtggtttc ttcttgagct gctgggtgat atggctgtcc caccagttgg 420  
 ttccaagaac cacagcgt 438

<210> 1875  
 <211> 384  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-036-Q1-E1-G12  
 <400> 1875

caagcctcta caatgacgtc gtactaacgc gtgtgccgaa atcggtctgt aagcgctata 60  
 gcgggaacta tagtaaaggg gatgcccttg tgggataaga tctcaacacc aaggtttcag 120

tctttatata caaatgtcct ttgaaacta atatatgata cagtcttctc attttcgttg 180  
aactatatta catgtacctc tatgatctat gcaatatgtg aaaatagtgg aatataattc 240  
tttacggatc caggtatatt tattgatgta caccactatc actacacaag ttggagatat 300  
aatttatttt aatcgtgtac tactgttact acgtaatatt cgaacttaga tatgatatct 360  
gtttacttac aatataagtt tact 384

<210> 1876  
<211> 429  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-036-Q1-E1-G2  
<400> 1876

acgcgtccaa aaaatgtggt tggtcggtga aaaccatggt ggcagcttct ccttctcgca 60  
agttggaaat acaatgtgga gtattgaaaa gaacgttgaa agatatatcc gcttatcaaa 120  
aggagtttac cgagatgaag gagcaaatac aacgggcaac acccgatcaa ccatatcagc 180  
aatggcaaaa agtggttgaa gaaacggaga gaatggtatc ggactcgtat aggaggttat 240  
cggaagcggg agacagtta caaaagttgc aaacgcagat ggaaaatttg cgaggaacca 300  
aagaatggga acaagccgat gcgttggttac aagaagcaca gcaggtttta tcacaaacct 360  
cgaaagttta acgaaacaaa gcaatgtatt gaaactgcgt cgacttggtc aagatgcgag 420  
catcgtaat 429

<210> 1877  
<211> 261  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-036-Q1-E1-G3  
<400> 1877

taaaaccgaa gtcacccaaa atttgactt ttttgtcaaa aacgccgatt aaaggaaggc 60  
ctgacgtacc acaattagac aaggtaggtt ttgaatgtga aaatcagttt gtagccggca 120  
acggttttga cggatgatcaa cgtttgaggc accttgattt cgttggcata tacaatacaa 180  
accgatgaga gaaacggcac aaggggtttt ccgtattgtg gctggaacac cggctacttg 240

aataaaaagaa agtatTTgtg g

261

<210> 1878  
<211> 421  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-036-Q1-E1-G5  
  
<400> 1878

agcgaaagat ttgtctcgaa tctttcctca gcaagtccaa ggattggctg cgaaggctga 60  
cgaatatgcc agagcactgt ttacaggtgg tggcactcta ttcgaagaac taggtttcta 120  
ttatgtcggg cctgtcgatg ggcactcttt agaagacctc attccaatac tcgaaaatgt 180  
acgagatatg aatgtgaata aaccagtcct cattcatgta aaaacagaaa aaggctcgtgg 240  
ttatcctcca gcagagaaaag cgttagataa gtatcatggt gttactagtt ttgacattga 300  
aactgggaag cttctgaaga aacaagagac taagtcaact ccagctcctg ccagttattc 360  
taccgtattc gcaaacacat tgattcagga agcagaagag gatcgtaaga tcgttgctat 420  
c 421

<210> 1879  
<211> 395  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-036-Q1-E1-G7  
  
<400> 1879

acccacgcgt ccgcccacgc gtccgtggac ttgtccgata gcaatggctt tggattggct 60  
tccagtaatc atcatcatcc acatagtaat agtgggtggg gatgtgaaga tattcgcgat 120  
tggtggagaa aagaattttt atttctgcca tcacgtgaaa gctatattga atattataat 180  
catatttcca ggcgattgtg taatcttacc gagtcgttgt ccatttcctc cttacttgtc 240  
tagatgggat aaaaaaaga tatctgaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300  
aaaaaaaaa aaaaaagaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 360  
aaaaaaaaa aaaaaggggg ggcccccta aagg 395

<210> 1880

<211> 423  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-G8

<400> 1880

gacccacgag tccacgtgat acagagtagg aagaaaagag aagagagcta gaaaggaggt 60  
 aaaagaagag taaaaggact agaagaggta cggaattcac gaggaaggag cgtgaaggaa 120  
 ggaggaatcc caagtaatcg aggaagaaaa agcttcggtg aaagcgtgaa cggattttgt 180  
 acacactgcc cgtcaagttc tggaagtgtg ctaggaataa gcaggagaag tagaagagag 240  
 taggaaaaga agaaaggaag tgaagacgta agacgtgata cagagtagga agaaaagaga 300  
 agagagctag aaaggaggta aaagaagagt aaaaggacta gaagaggtag ggaattcacg 360  
 aggaaggagc gtgaaggaag gaggaatccc aagtaatcga ggaagaaaaa gcttcggtga 420  
 aag 423

<210> 1881  
 <211> 379  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-036-Q1-E1-H1

<400> 1881

agatattgca gctagtggga aagcggaacg aaatgatctc caacaatggg tctcaagttt 60  
 gcacaaaatg ccaaaaagca tcaaatagtt attcccaaac gttacaaaac tcatcagtgg 120  
 atgattgttt caacttctgc gaaaactggc aatgcatctc ctgctacaca gtgctatact 180  
 tcgcacactt cctatcagaa ccttgtaaag gaagtagaaa agaaatggag cacaggaatg 240  
 cgtattgttt tgtaagttt cactgcanga atgtggactg cagtattgaa tcagaagagc 300  
 actggctatc aagagcaagc ttacattat tgtccaggag ctgactttcc acgagaatgg 360  
 gttcgacaga aatgggatg 379

<210> 1882  
 <211> 465  
 <212> DNA  
 <213> Cyanidium caldarium



<223> Clone ID: LIB190-036-Q1-E1-H10

<400> 1882

cacgcgtccg aaagaggaaa aatggcaagt cgaggagtag gtggttttca gttgttttagt 60  
cgctgtttt cttcggttac tagtcgtcca attagtattc catggatata taggatacct 120  
atctcgagtt ttactacagt gacttcttta aaggtctctt ctaggggcaa catgaatata 180  
aagcttgtag ctcaagtatt caaacgtcga ctgtttctac aaagccaacc aacccccaac 240  
ccagactctg tcaagttttt acctggaaga gaagttattc ctgacggaaa cagtatcgac 300  
tttcccaatg cacaggtgc tcaaatttct cctctggcaa aaagactatt tcagatacaa 360  
ggcatatcgt ccgtatttct aaggccggat ttcgtgactg taacgaagaa ggaagatgtt 420  
agttggtcag tattaagac agaaatattt gaagcaatac tggag 465

<210> 1883

<211> 450

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-036-Q1-E1-H12

<400> 1883

acgcgtacgc ctacgtcgcg tgtttgcaat gtgctggaat ttatttcggc tacaaattga 60  
aagatttttt ggctttttca ttggagggtg aaaactgcat atctttgata caagtgttga 120  
tttgtacttt tattcgagaa tatcttatgc tttcgcgacc ggagtgtagt ttgatgcaat 180  
gtgggacgag ttggtcgtag ttactgaaca cggaatcttt gcaagacgtg tttttggaaa 240  
agcgtacaaa tagcttgaga cagtctgacg caattcttta cgtccaatat tcacttcaaa 300  
cacttcattt tatgattcat cgcttgaagg agagaggtag ctggttgaac tttctgttga 360  
attacagtgt accgttactt tcggttttga aggcaattat cgnaagacaa caacagaatt 420  
tcccatttct gaaggaagcg agtgaaatat 450

<210> 1884

<211> 433

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-H2

<400> 1884

ccgggccgac ccacgaatcc acccaggctg gttgcctcta tgtcggacgt catggaagag 60  
aacgaaaaaa tgcaaaaaac ggtacacata ttgattctaa caatcaaattg tggataaaga 120  
aaattgaccc aaaaggccac gtggaacata tagattgggtc aagaaacaac aatgcagtga 180  
gagatgctgt tggagccagt tttccaggat acttagaaaa tgaagctgtg gtttggagta 240  
gcaaaagacg aaagtggata tttctccctc gacgttgggtc gttggaacct tatgatgatg 300  
aaaagaatga gtttcgaggt tggaataaga ttattatttg cgatgaagat tttttgcaca 360  
ttcgaatgtt accgttgaac atggaacttg aggaagaaaa gggcttttct agtgccaagt 420  
ttgttcctgg ctc 433

<210> 1885

<211> 328

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-H4

<400> 1885

acccacgcat ccaccacgc gtccgggttg gctcctgttt acatgcggag gcaaacctga 60  
acctcaaaag cttcagggaa tacgtgcagg tttaataccg gatataattg ataccagcag 120  
aagttttcaa cttattgcag gtaatttcag ccgatgcaat cgcaatggca cgaaggatgg 180  
catccgatga aggtttattg gcaggaatat cttcggggagc tgcatttaac cctccatttg 240  
ctattggaaa gagaccggaa catcgaggga aacgaagatt gtgtatgatt ccaagtttcg 300  
gagaacgata tatgacaagt gcaacgct 328

<210> 1886

<211> 422

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-H5

<400> 1886

acccacgct cgcgccacgc gtccgcggac gcgtggggaa aaatctcgct ggaagacatt 60

tcacctcaca ttttgtgaca atcattccat cctacacgca tttttactca ttgttggttg 120  
aaacgatatg gcagagaagt tgacagagat caaggataaa gttgccgata aaataagtga 180  
aatgactgga aacaagtcac ctcaggacca ggcgaaggat aaagctagcg aggcagggga 240  
ccgtatgaag gatgcaggaa gtgctatgaa ggaaagtgtc caaaatgcag gggacgccgt 300  
caaggataag atgtccagca tgaaggagtc tgtttccaac aaagcggaag gtgtgaaaga 360  
aggctctgcaa aagtagatac tccgagggtta tctcatttgt ttcgtcttgt ttgtgggtta 420  
at 422

<210> 1887  
<211> 417  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-036-Q1-E1-H6  
<400> 1887

ccacgcgtcc gggggcaagt tgacctctgc tttgccacct ttttttggtc gtcctcatg 60  
tgttttgctt ttttaaagct tgaagactat ttccttttat gatttaggga tttctccaga 120  
ggtttttgta ctagtattat tcagtccttc gtggtgaatg aatgactcct ttgacaacaa 180  
ggttgtcatt ttcccgccat ctccacagct tcaaccgcca atttgtgtcc gcatatatac 240  
atatatttgt acagactcgt ggtgtagaaa gaagagtgc aagtgttgaa aagtaacagc 300  
agagggttag tatacctgta gaggaagcac ttgaaaaagg ggtcacgtcc ttttacatgt 360  
ctacaagtat ttttttgctt gtagaaattg caagtttagt gtactcgaca atgtttc 417

<210> 1888  
<211> 371  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-036-Q1-E1-H8  
<400> 1888

acgcatccgc ccacgcgtcc gggttggttg gggtagcat gccgccgcaa gtagaaacaa 60  
gtacaccttc tggatttgca gtaggcctga ataaaggaca cgccgttacg aaaaggaagt 120  
tttcaaccaa aggactgaaa agggagaaaa aacacgcaa gtttgtacga gaaatcatcc 180

gtgaagtttg tgggtttgct ccctatgaga agcgaatcat agagttgttg agagttggga 240  
aagataaacg tgcgctcaaa tatgcgaaga agaggttagg aacgcacgtg agagcaaaga 300  
agaagagaga tgagatggcc agcgctttac gtcgtagtgc acggaaataa aaatagaaaa 360  
tattgggctg t 371

<210> 1889  
<211> 408  
<212> DNA  
<213> Cyanidium caldarium  
<223> unsure at all n locations  
<223> Clone ID: LIB190-037-Q1-E1-A1  
<400> 1889

acggacgcgt gggcggacgc gtgggaaaaa aaaaaaaaaa aaaaagaaaa aaccaaaaaa 60  
aaaataaaaa acagacaccc ttaactaaga ccaaccaatt tgctaactac ccaatctagg 120  
gggaaccttt tgacattaat ttacaaaaat ggtgtctgca acttaattta acgaatttca 180  
tttgggaaat tcaaaatttg gcaaaaaagt ttttgatggt acctgccgga caatcctaag 240  
catgatggat aggctggaaa tgcgcgtgga gaagatatcg tgaagaatga gccatccata 300  
tattatagaa atatatatat atatatatat attggtgaca tatataaagc aatagacaca 360  
agttgggtat tatttcanaa aaataaaacc gccaccacgc cttgcaat 408

<210> 1890  
<211> 256  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-037-Q1-E1-A11  
<400> 1890

gtgatgtcag aattgttatg gcatctcgtg aaatgccaca acgcattcca aataagaaga 60  
aaaggagtca cgctttcaac agagaaagga aatttaaagg gtgtcagtac ttttaaatat 120  
tcgggtcatg ctcaaccgaa ggccgtcgac attgctccag ctacagaaac ttttggtatt 180  
ttgtactcga agaaacgtac caagaaagat gctgctcgaa aaccttcgac ggaatttcat 240  
actgatgtcg tgaaaa 256

<210> 1891  
 <211> 391  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-037-Q1-E1-A2

<400> 1891

aatcattgtc atcatgaaag ctgctgtctt tgcattcttt gtcttagcac tatgcgccgt 60  
 tgctattcaa gcttctcctc tagaggacac tttgggtgcc tttatgcggg gtgggttatca 120  
 atcgcaaagc caagcaccaa aacctagctg ttgcaagttg agctgtcatt atacccaaat 180  
 ttgtgaacaa gttatcgctc aaactcaaca ggctgtccan actcagcaag tttaccanac 240  
 acaacaagta cagcaaacac aacaagtttc gtcagcatac ggacgcaatg aggtatccan 300  
 anggggatat ggccaacagt ctgtagcccc agctcctgca ccttcctgtg tcagtgttcc 360  
 agtcaagtgc tgtattgagt gctcgtcttg c 391

<210> 1892  
 <211> 227  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-A3

<400> 1892

acccacacgt ccggttatac ccaaaaatca gggcaatgca attcataatc caagttgaaa 60  
 caaccacagg aaaacttgcg tctactcaag gagacaattt gcgagcattg aaactcgggc 120  
 agaggttctt tgaacacccg aacagataaa atcagtgaaa acttgcagaa ccatcaagcg 180  
 cgtgtcatga acgcgtaagt aattgactgc ttacgatatg tcgtcga 227

<210> 1893  
 <211> 346  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-A4

<400> 1893

gtcaaattac ggctcgagcac gcgtccgacc acacgtccgc ccacgcgtcc gcggacgcgt 60

gggcggcaca ggaagaaacg gctattcctc ctccaccatt cttgcgcttt ctctctcaat 120  
 gcaaccacaa gataaaggta ttcccgaata ttgtcaactt gacagagtac ctctacaaga 180  
 aaagaatcaa tccgttcac accttgctcc aaccgacgaa catacctcga aacatacatc 240  
 gacttggtat cctccttctc tacaaagaaa cacactttac caagtatacg aaatgtatgc 300  
 atttcgtggt ggtggcgtag ggtttcgaaa aaccggaatg aaagta 346

<210> 1894  
 <211> 381  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-037-Q1-E1-A5

<400> 1894

cgtccagtta tacccaacaa gtattgcaag ggacgagaaa aggggatata tcggtaggac 60  
 gatatatatc ggatacttta tcgatgatac ctcaattgga tagtacaagt atagagaaac 120  
 tgtttgagaga tcagttgaga gatgtgttga tgatacttta tttagacaag ttgatttggg 180  
 caaatgcaaa gttggcagaa aagtttttga tggtagctgc cggagaatcc taagcatgat 240  
 ggataggctg gaaatgcgcg tggagaagat atcgtgaaga atgagccatc catatattat 300  
 agaaatatat atatatatat atatattggt gacatatata aagcaataga cacaagttgg 360  
 gtattatttc anaaaanaaa a 381

<210> 1895  
 <211> 205  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-A7

<400> 1895

acccacacgt ccaaattcat tccatccttc cgaagacgat tggatatttg ccaatgatgc 60  
 actactttat ggtggtttac gagaagaatg gccatcgaat agtccatggt tggaatggaa 120  
 tcgtccacca caacaacaac aacttgattc cgtataacca agaaaagata atcacaagga 180  
 agatatttga gaagaagttt tttcc 205

<210> 1896  
 <211> 372  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-B1

<400> 1896

cgtccaatgc aatatccaat gaagagagcc ttttccaaag taccctttcc aaaatataac 60  
 aaacctgaga tacgtacaga aatacctgga cccagatcaa aacaactatt aagtgagatg 120  
 aacgtgcttc aagaaacaag gactataaac ttttttatga acacagccaa gagtcaggga 180  
 acatatgcag tggatgccga tggaaatgta atattggacg tttttggtca cattgcctct 240  
 ttacctttgg gttacaatca tccctgcaatg gcggaagctg cttccaaacc tgagtggcta 300  
 ccgtttctct tacaagaca tgcgctaggt gtacaaccac cacgaagagt ggccaagaga 360  
 gctaagagaa ac 372

<210> 1897  
 <211> 356  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-B11

<400> 1897

tgcaactctt tttggtatcg ctcatatatg atgccttttc agtagcgtga agaccattta 60  
 atctataggg atttatcaag ttctgcagag atatctcgta cgagtccttt tccgtgtttc 120  
 gtaaagggtg aaaggctcct ttcacaacac ctttgtcatg atcccgccaa tctccacatc 180  
 ttcaattact aatttgtgcg cgtatgtaca agtatatctg ttcagacacg tgggtgtagac 240  
 agaacattgc aatggttgat aagtaattgc agagtactaa tgtacttgta cacgaaacac 300  
 ttgacaatcg gtcacgtcat tgtacatgac aacctacaat agcagtcctt tgcacg 356

<210> 1898  
 <211> 413  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-B3

<400> 1898

cgccccacca caagtcgcc caccgcgtccg ctgacgcgtg ggctttgtgg ttatatgaa 60  
 caagttccaa ctttgatacc actttttgca accgctactg agttcctttt atacaactta 120  
 acctttctaa cgaacaaagg aatgaaacta gttgaatatg tgaattttct gacttggggg 180  
 ataagatgga cgttacaacg aaacttaacc aactcacaaa ggaaacagca tttcctctta 240  
 attctaacta cgccaacact gtgtcagtag ccggcgggaa gacgagtttg gaagaaaagc 300  
 gtcttggtgt attcaacttg agagaaagaa acaaactgta cagttagata atcgagaaca 360  
 gaaggttcct tcgacaacga tggcgacaaa atcgcaatag gccactcaaa tgt 413

<210> 1899  
 <211> 426  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-037-Q1-E1-B7  
 <400> 1899

agttgcaact tttgtatctc atcgtttggg ctgtaaatgt tgctaattgga acagggtaag 60  
 caacctaaac ttatatatgt tgaaaactaa atgaacgaaa agaagctggg gtgagcatgg 120  
 aagtgccacac tattagtgtc gccaaacatg actctgaaga tagccacgaa gaagtgagga 180  
 agcgggttgag tagagtaagc gctccaccgt ttcccgatcc tactttctta ggattatctg 240  
 gtttttagttg cacaactttc attcttagcg taatgaatgc caaattattg ccagcgagga 300  
 ttgtaccagg aattgtaggg cctgcctttt tctatggtgg aacggtacaa atgttggcgg 360  
 gccttttatg ttttgtcact cgtaacatgt ttggattggg ggcatttact tcatttggag 420  
 cttttt 426

<210> 1900  
 <211> 391  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-037-Q1-E1-C3  
 <400> 1900

cgtccatttt gattgtggtg aaaccgtcgt gaaaccaagt tggcttcgat gaatgatgaa 60





agttgaggag tatcccgctcc aagtaaattgg ttgactgaga cctgaggaaa cgttgatggt 240  
 acatgacaga 250

<210> 1903  
 <211> 408  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-037-Q1-E1-C6  
 <400> 1903

agttgtgggtc atggcagatt tggtcgctgc acattacccg cgtaaagtct tgtgctatgc 60  
 attccacttt cttctagtac caaaaacaac gagtttaaaa actcaagtct cgataaagcc 120  
 ttctcatgta tgccttcgat acccaaaggt caactctttt caaaatctca agtttctggt 180  
 gtgttctcca agagaaaacg ttcgcaaacc ttccacctgg cttattcata tgtccaacga 240  
 tggctataaaa ggaaagccac tgctcgatac atcttttcag ttgtacaaaa aaatcgcaag 300  
 ttctgcgact taatggtacc tccaaggaga tttggcggct tctcttcaaa caatatatcg 360  
 gcgtgccttg tttcagggag ttagttcaca gagcatttcg tgggcgct 408

<210> 1904  
 <211> 393  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-037-Q1-E1-C7  
 <400> 1904

gtccagatgt ggtcatggca gatttggccg ctgcacatta cccgcgtaaa gtcttgtgct 60  
 atgcattcca ctttcttcta gtaccaaata caacgagttt aaggactcaa gtcgcgataa 120  
 agccttctca tgtatgcctt cgatacccat aggtcatctc ttttcaaaat ctcaagtttc 180  
 tgggtgtgttc tccaagagaa aacgttcgca aaccttcac ctggcttatt catatgtcca 240  
 acgatggcta taaaggaaag ccaactgctcg atacatcttt tcagttgtac aagcaaactcg 300  
 caagttctgc gactttattg tatectctat ggacgttggc tgcttctcat ctagcaatat 360  
 atcggcctgc cttgtttcaa tgagttagtt cac 393

<210> 1905  
 <211> 339  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-C9

<400> 1905

gcgtccatgg gaatccgcgc aacttggcgc catgttacgt tccaatccaa ctgcgttcct 60  
 ggtatgggtg actgtagcta gttccgctgg ttatgtaaag ctgcacagag atgtaaaata 120  
 tgcaggaaat atacttactt cgagtataca agagtgggcc gatgaggtaa cccaaactac 180  
 caaagaactg gatagtaaag tccttttttt agaaaaggag ttgaaccgca ttagagaact 240  
 ggcaaccgtc gaaaaggatc caagttctcc ttcgagtgga caaagtaatc aataacgcac 300  
 cgctactagt ccttatttct gtcgagtatg ttgcctggg 339

<210> 1906  
 <211> 268  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-D12

<400> 1906

catgggaata ttatttggca gtttggtgaa tgcattctgca acgaaccac ttttgatcca 60  
 tcagttattt ggatacacga tattagggtt tgcgttaaca ccaggcagta cgactgtttg 120  
 cattgatgat gagttttttg ctaccgtttt catactatat gacgaaacaa gacgtagaag 180  
 ataaactttc agagacagtt agacgagtta tgagagaaaa gatggaacgt cctataactg 240  
 gtaaattggac tactaatgaa tcatatga 268

<210> 1907  
 <211> 403  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-D6

<400> 1907

aaaagacccc ataattcttg actagatagg tttaggagg agagagaatc atgaagtaca 60  
 ggaggtgggg taagagatga aagaccactg catgaggata atgaatctaa ctgagtaagg 120

aaaataagct taagctagtt tggctgggga agtaaagcct aagaaagagt aaattacgca 180  
 agcaaaggca tgagagaagt ataatagcag aagcatgctt gaagaaaaag aaagagattt 240  
 cagaaaggga agaaaagtca gctatagaga acaggtgaac gagaactcag aaagaggaga 300  
 gcaccgaacg atcgaagaag aaactttggg ggtaacaggt taatgtggtg ttagagaacg 360  
 tatcaagcac cacgattgac aactcgatgt cgggtcatca cat 403

<210> 1908  
 <211> 434  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-D8

<400> 1908

aagagagatg gggatatgct cagcaaacc aacaacagca acagtgccaa caagtatgta 60  
 aacagtatgc atactatcag agtccagtct gcacttccgt aaccacacag agcccatact 120  
 ggaccaatg ctcgaagact gtgcaaacct ttgtcccaag ccagtgcagt acttataccc 180  
 aatctcctac atggacctat tgcagcacct acaccaccac tagcgtacca tctcaatgca 240  
 gcaaggccgt gactacctat actcaaacct gctgtgctta tgcccaacaa acttcctatg 300  
 cagtcagtac cgagcaatat gttcaggaaa ctgtatctgc tcaatatact tcttactacg 360  
 gcgaatcatc ctccagctat tattaccgag cagctgctcc tcagagatgg tatgaggaa 420  
 aatgcaactc atac 434

<210> 1909  
 <211> 197  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-E11

<400> 1909

gtcgtgacat ttgccaagaa gggagattcg gatttgggag tacaagtaat tcctaactag 60  
 ttttctttca gtgtggattg tgatatagt catgatgttt ctgaaaaatg tcaagaggta 120  
 tgaagataga aaaggcaatc atgggttaaaa gtaaagtga tctggaggcg tttatcagga 180  
 agcttgtcta gtcgaac 197

<210> 1910  
 <211> 415  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-037-Q1-E1-E2  
  
 <400> 1910

```

ggtcagaatt acgggcgagc acgcgtccag gctaaaatgg tggaggagac agtctgatgg   60
aatatcgata acggaagaac agaacttctt tcatgggtgc tttctagaca cgcttctttc  120
atgtggacag gatagtgtgt ttatgctggc acgtctgttt cctttgggcg tcctttttgt  180
tacacgacac ttctcatctt gtagcacact ctactagatt tcctagaaat atataagaac  240
cagttcgagt tggtattatt tatagccctc gttatgttgg atgcaatact gttcgccaag  300
cctttattca atacaaagac tctcaatatt ctggattttc aagtgcattt ggctgattta  360
tagcatgcca ctttttaaac gcgggtagct catccaatgt cttggcaact ctcac      415
  
```

<210> 1911  
 <211> 413  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-037-Q1-E1-E3  
  
 <400> 1911

```

gcgtccattg aaaatcatgg tagacactaa ccttaaggac ggtgctagtg ctgctctttg   60
gacttgccgc ctatttctct atacagttgt gttagcattt tcagcaacaa taattggact  120
tgatggaagg aacgcagata acatatggaa cgatgcccta tattatcatg gaaaagtggg  180
gaacttttgc gcatattcgg ctctgtctgt ttttgaaggg ggcgaccatg gcgcatgtaa  240
atatgtgatg gctttggctt ctatcagctt gattttagtt ttctttcttt ggttggcctc  300
ctttgtcgac gcattgtatc caattcttac aaagttccgg gtttgtggag tttggtatca  360
acatattccc ttactatgtg gtggttggtt ggtgcaattg tggtgactgc aaa      413
  
```

<210> 1912  
 <211> 396  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-E4

<400> 1912

gggccgagcc acgcgtccac ccaaacgtcc gcaactggtag atcatctttg agagagaatg 60  
tcctttcctt tcgtttccac atagaaaagt cacggaaaaa ctttttgaag cagacctgcc 120  
gaattttcca agagcactag tctatggtga gacaagttaa gcctcctttg tggcgctcctt 180  
gctatcgatg atgagttgct ttgacctgca actttcgctt gcctcaaaac gcgagacaga 240  
gcgacctttt ggtccagaac aggaaacgac agtcattcct tatgaaatat gcttcaaata 300  
tgcgtaaga cactctgtaa cttggcgact cgtctaggcc cactgtatgt tgccacaaga 360  
gtgttttacg agatgaatgg gaacttgctt tattca 396

<210> 1913

<211> 394

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-E5

<400> 1913

acggacgcgt gggcggacgc gtgggaggac gcgtggggca gaagccatct tgcaattgta 60  
tatgatgacg tatcgaagcc tgaaggagaa cgcaagttaa tgggtatcgt tactttggaa 120  
gacatcattg aagaaattct tcaggaaatt gttgatgaga ccgatgttta tatggacatg 180  
aagacaaaga aacctgttct ctttcggggg ccagatggtc gcctacatcg cagagctttt 240  
atcggaccga aaaagccaca tactcaaata acaattagag agattgacat tggaacttta 300  
aagcatagtt cgagcgaccc aaatctatcc gttaggagaa aaaaggcggg agaaaacttc 360  
aataagcaag tgatgcgcgg cgatatcgat gaat 394

<210> 1914

<211> 420

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-037-Q1-E1-E8

<400> 1914

acaagtatac gctttggttt aggtcgatTTT acaactgaaa aggaagtgga ctttactgtt 60  
gagttggcaa agagacatgt tgcacgttta cgagaaatga gtcctttatg ggaaatggta 120  
caagaaggaa tagacttgaa gagcattcag tggacacaag agcattgaat gggaagcgag 180  
atgacaagtt ctatcagaag cagcagcagc agcagatgtg gttttgcctt ctattcttgt 240  
aggtatggca agaataaact gcaacagaca cttgtttgtt gttacaaaag caacttggca 300  
tcatcaaaaa aaaaaacaaa aaataaaata aaaaataaaa aaacaatcaa aaaaaataaa 360  
aaactaatat tcatcaaaaa ctatataana taactaatat aaaaaaaaag ggggggcccc 420

<210> 1915  
<211> 434  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-037-Q1-E1-E9  
<400> 1915

acgcgtccac ccacgcgtcc gcccacgcgt ccgcccacgc gtccggacaa gtggttgctg 60  
gaattcgcaa ctacttttcc aaggatgaat tggtgaatcg gacggttatc gttgcgtgta 120  
atttgcaacc ggtggttttg gcaggtgtcg aaagtcaggg aatgatattg accgctgaaa 180  
agaaaggcaa ggtgcatctt ttatcctgtg aaaagtggga tgaagagaag aagaaactag 240  
aagaggctcc tgcactaggt acgttggtgg aaatagatgg cggcgatgta tccaaagcat 300  
cgtttccgat attggatagg aaaggtttcc aagacgcgag taaatgggtg aaaattgacg 360  
gacaaggaca tgtagtattc cataagaagc acaagttgat ggccaaaaat tgcgtagttc 420  
acggcaacgg tgcc 434

<210> 1916  
<211> 349  
<212> DNA  
<213> Cyanidium caldarium  
<223> unsure at all n locations  
<223> Clone ID: LIB190-037-Q1-E1-F10  
<400> 1916

cgtccacgag aaaaggaagt agaaagaaga gagtgtaagg cggcgtcata atagaaatcc 60  
gaaaggagta, gaagaaaaga gagagaagaa agaaaagaag agaaaagccg tactgaagac 120

cgacacaggt actcgaggag aaaggagacc caaattaagg tgagagaatg gacgataagg 180  
aactaggcaa aaggatatgg tatctgcggt agaacatatg aaagaagcag caccgactgt 240  
ttagcanaaa cacagcactc tgcagaaaag agaaaatgta agtatagag tgtgcggcct 300  
gccaaatagt agagaagaaa tcgatganag tgaaagcgag taaaagatg 349

<210> 1917  
<211> 326  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-037-Q1-E1-F11  
<400> 1917

gcgtccagaa taattcggca gaggcgctct tcggcgtaga acctaacaag gaagaactga 60  
aaaaagtatt gcaagtaaac gcaataactt aagcaacata ttttgctatt attcgtgcta 120  
aaccttttgt tatcgatgta gtaaaggcta tttccagaa agagtagaag gcttgagttt 180  
tggttttgtt ggcttgtatt cttggaatgt taccaactga agaatcattt ggaggctaaa 240  
tatgttgtga gtgttttctg gtgtcctttg tgttgacagt ttgttttttt tgaaaaacta 300  
aaaatatgat acaaagtgca ccaaca 326

<210> 1918  
<211> 424  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-037-Q1-E1-F4  
<400> 1918

gcgtccacga gagacgagaa ctccagaaat tggagacaag ttttcatctc gacatggaca 60  
aaaaggagtt tgtggtttga ttgttcctca agaagatatg ccattcaatg aacaaggaat 120  
atgtccagat attattatga atcctcatgg atttccttct agaatgactg taggcaaact 180  
attggaattg atggctgcca aatctggagt attgagtgga gaattaaagg atggtacagc 240  
ctttggtggc gatcctctgg aagactgtgc atctatgctc gttcaacatg gcttttctta 300  
tacaggaaaa gatattttat attcaggaat gacaggagag ccattacaag cttatgttat 360  
tatgggtccc atttattatc agaaactaaa gcatatggta aaagataaaa tgcacgccag 420



agcc

424

<210> 1919  
<211> 427  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-037-Q1-E1-F5  
  
<400> 1919

agagagttcc agttggatgt ttaaagaaaa gggacaccgg aaaatcagaa acaagttctg 60  
taggcgaaac agaagttgtc tcatccaacg acagagaagt tttgcctcaa agcaccgtgt 120  
tacaaagaga gagcggagcg gtgcaaaggc aaaaaatcaa aaacaaacaa aacagcccca 180  
gcgtcacata cgacacatcc tcagacaccg aaattcttaa ctgaggaacg agcacttcgt 240  
tatcgagaac gacttgataa gctccgagaa caatccaaac cgttcatcga acctaaaact 300  
ccgaaaaaat atgggcttgc ttggaaaccg ataccaactc aggctacaac accacacttc 360  
cgttcagact ccaggctccg tcaactgtgta gaaaaggcga tccttgaacg taacaaacag 420  
agtttttg 427

<210> 1920  
<211> 356  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-037-Q1-E1-F7  
  
<400> 1920

acttgcaact cataaaggca ctcgaaagct tgtcccttcc tgtgaaacaa atattattac 60  
agtctgaaaa caaggaagaa cagcttgaat cagaagatga actagcagaa cgtttggaat 120  
ggttattctt agatagttag atagctgata tgctaaggca cctgatacag agagtccatg 180  
ataacaaaat agtacctcta cgatataagc actctactag aaagaagtcg gatgaaaaat 240  
caagtggat ttgctccagt ggaaaggaag atttatcaag tcaaacgaag caagtcgaaa 300  
agagacaaac tctattgctt ctatttcaag aacgagtaca acaacttgag aagaag 356

<210> 1921  
<211> 337

<212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-037-Q1-E1-G1  
 <400> 1921  
 gcgtccacgg acacgtgggc ggacgcgtgg gatctacgtt tcttttccaa ccagcatatt 60  
 caataggagc ttcttttttt ggatcgaaga aataagagga ctgttggaac acctcttata 120  
 tgggtactttt ctccaacttg atgaaacttc caagcatcaa tggcagctaa cagcatattg 180  
 gtattgtttt caaaaaactt tgccgtctgg atatagtcag gagcaaactg ttgacaatga 240  
 ggacaccaag gagcatagaa tttaactagt acatccttgt cgggtattcat gataaaagaa 300  
 gtaaaattgg aagaaaaaaa aaaaaaggac ccgcccgc 337

<210> 1922  
 <211> 355  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-037-Q1-E1-G10  
 <400> 1922  
 cgtccaaact aaattgacat gcaacanagt aaccttcgag tagtccaatc ttctttggtg 60  
 gcaagctttg tcctcattct aagtataatc tgtgccattc atgcagtaac agccgatgaa 120  
 ataacaagtt tcgagagagg ataccaaaca gttgcaccaa ctcagacgca gcaatgtcaa 180  
 aagatttggtg tcaccgccac acaaactcaa gttcaaagtt gtatttatac tcagacacag 240  
 gctccgttca tgtctcaatg tgtcacagca ttgccaaacta cctgctataa atacgtaaca 300  
 caatataagc acgtgtgctg tgagcaagaa tacgagcaac agaattatca acagc 355

<210> 1923  
 <211> 335  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-037-Q1-E1-G4  
 <400> 1923  
 aatggttaat ttaaaaggac tccaaggaaa ttggttcgga ggaacgggtca aatagaaccc 60

gcaatttaac ctatcgatat aaggcagttt tgcaagaaaa tttggccgat cagtttcaaa 120  
 gtttttccaa gtttaatgaa gattatgttg cgcgccaatt gaaagaaagg gaatgtagtt 180  
 atttgcata atgatataaa cgttggaaat ttgtaaaaaa acaccacatc tttacctgaa 240  
 aacctgcata attggaattt gaaggcacgt tgtagcagcg aataatagtt gcgatagaga 300  
 gattgaaaag aggttttaag taaaaaaaaag ggggg 335

<210> 1924  
 <211> 398  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-037-Q1-E1-G7  
 <400> 1924

accacgcgt ccgcccacgc gtccgaggac gcgtgggatt ctttgtgctt ggacaatgg 60  
 tgcaaagact gctctgagtt gcctctttct ctctttcctt atcgctgccg cagttgcagc 120  
 cgacgtagtt tcagaggaga gatggggata tgctcagcaa acccaacaac agcaacagt 180  
 ccaacaagta tgtaaacagt atgcatacta tcagagtcca gtctgcactt ccgtaaccac 240  
 acagagccca tactggaccc aatgctcgaa gactgtgcaa acctttgtcc caagccagt 300  
 cagtacttat acccaatctc ctacatggac ctattgcagc acctacacca ccactagcgt 360  
 accatctcaa tgcagcaagg ccgtgactac ctatactc 398

<210> 1925  
 <211> 395  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-037-Q1-E1-H10  
 <400> 1925

ttagtaacgt tatctcctgc agctgaccgt atagttggcc taggaaacaa gaaagcttta 60  
 tgtttgcaaa gtaaaaataa tagaacaagt ttaaaaaggc caatttcgtc ttctagtcaa 120  
 cttttgcgaa tgactggagc tacttcctct gcttccgatg acagtgttcc agatatggga 180  
 aagagaatgt tcttaacta tgtcttgctt ggtggtgctt ccattccaat cttatctatg 240  
 ttgggtggtt atgcatactt tttctatcca ccctctcggtg gtgggttcggg tacaggtact 300

gttgcgagag acgtgttcgg acgagaaata aagaaaaagg aatttttggg aacgaagaaa 360  
ccaggcacgc atgagttggt acaaggacct aaagg 395

<210> 1926  
<211> 343  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-037-Q1-E1-H12  
  
<400> 1926

cgtccagtgg gcggactctt gggcggactc gtgggctttc gttgaaatta gaagtactcc 60  
tgcagtgata caaatgctac acggaagtgg acgggagcct ggttactttg gcgttgctcc 120  
tttgggcttg ggaaataacc cgcaactcta caagcgattt caattgtccg agttgtcgaa 180  
cggtcgattg gcaatgatat ctcgtggagg actcaatcac cagtcatttc ttactcatat 240  
agggtgctatt caacagttgc atcatcatat atggtttcca gaaaatcgtg gtttgtgaca 300  
aggaatagtt gtggatgtgg gacactagaa gaatattttt ggc 343

<210> 1927  
<211> 433  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> unsure at all n locations  
<223> Clone ID: LIB190-037-Q1-E1-H2  
  
<400> 1927

gcgtccacgg aaacgtgggc ggacgcgtgg gcggacgcgt ggggttatta gcaccattta 60  
cggttaattgg attggctatt gcaggcgcgt ccacctatgt caaacacaag acaggacaag 120  
ttgtagctta cacgatagga atggttatct atgatctgtt ttggggaagt gcttttaggtg 180  
cagtgcctat tgcagtcaat tctgaagtct atccacaata tttgcgctcc aacggtatga 240  
gcattgcggt gatagccact tttgttgaa cctttacgac gacatatata ttttcgagaa 300  
tggtgcattc tatgacaaag ttgggtacct tgcttggttt ctatggtgga gttacttttc 360  
ttggttgggc tccaggtatt ttctttatgc cagatacana ggatcttact ttggaacana 420  
tcagacaagt ctt 433

<210> 1928  
 <211> 313  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-H6

<400> 1928

accacacgt ccagatagag atgtggataa tgtggggaat aatgagtgtg agtaaggaga 60  
 taggagtaat gatgagtata agtatgatat taacggtagt gtatacgata tggatgtata 120  
 accgagtata taagggaata aggaaggagt atataaagaa ggagatggac ataagtagga 180  
 gggagtataa cagtataagt ccgttagtgg taataatgat aataatggga gtgaagccaa 240  
 gtatatggag tgaagtatgg taagtgtgta cataataggg atgagcctag taatgatgaa 300  
 aggccaatca aag 313

<210> 1929  
 <211> 426  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-037-Q1-E1-H7

<400> 1929

agaataagtt ttggcgccaa cctggacttt aaatatgcgg caaaacttgt ccggtggtgct 60  
 tatatggtgt ttgaacgtcg agtggcagct gagaaagggt atgcttcacc agtttttgac 120  
 cgtatagagg agacacacaa gtgttataat aatattgcag ctagaatgat caaccagggt 180  
 agtcacaaca gtgcctccgt aatgtttgca acgcacaact tggattctat ggagagagca 240  
 gctactgaaa tggctgaaaa acagctgcac gctagcaatc ctaacgttta tttcgtctaa 300  
 ttgtatggaa tgggagattc tatgacaatg gccttagcga aggaaggtta taacacttgc 360  
 aaatacgttc caattcggac tgtacaggaa gtgatgcctt atttaactcg tcgtattgaa 420  
 gaaaat 426

<210> 1930  
 <211> 403  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-H8

<400> 1930

acacgtcaac gtatagctgc tgttttcatt gcagctttgt cccaaagttt accaagtcaa 60  
aacggcttca ggttgataga tccactaggc attctacttt acttgtagct tctacccaaa 120  
ctgcttctaa tccaatgacg aaagtgccga gaaaccctaa tttggcaaag ttggaagcag 180  
gttatttgtt cctgaaata gccagaagaa gaagtgttta tttggaaagt catcctgatg 240  
cgaatatcat cagtcttggc attggcgaca caacgcagcc tattcctgcc cacgtcgcgc 300  
aaaagatggc tgagaaagct cttgcccttg cgaccctga agggatttca ggatatggac 360  
ctgatttaag ggaagcagaa cttcgcaaaa aaatatctca acg 403

<210> 1931

<211> 379

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-A1

<400> 1931

gaagaagcct tccgcggcgc gtgggtcggt ccgggttgct ggggacgcgt cccgtttggt 60  
tttgtgtggt atttgaatgg cgaccaagag aataaccaa gatttgcaag acttgggtag 120  
agacccccct tctaaactgta gtgcggggcc cgtacgggac gacctctttc actggcaagc 180  
tactatcatg ggccctcctg actcgccata tgctggtgga gtgtttttcc tcaatatcca 240  
ttttccaacc gactatccgt ttataccttt ttttgtgcaa tttaccactc gtatatatca 300  
cccgaatatt aactccaatg gaagtatctg cttggatatt cttcgcgacc aatggagtcc 360  
agcactgact atctctaaa 379

<210> 1932

<211> 403

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-A10

<400> 1932

gtccgaaaga aaaaaatttc tctgaatagt cttcattcca tgtttcaaca aatacatact 60

gaagttgcta ggtttaccba aaataagtac caagtcactc atttggcaaa cgatgtatta 120  
 ttgaactacg gactatcgtc ttatgatgga aagaatgaaa atactcaagt agagcctggt 180  
 atggataccc attcagttac tctcaaagcc ctgcgcaaat tgcaagataa ggttttatact 240  
 ttgcaagatg cggttggcaca atcccaagaa gaagcaaagc gttataaaaa gtctctatgt 300  
 gctttaagag aagaacatga aatgactatt caaaggtatg gcaaagagtt tcagttgctt 360  
 tttcaagaat tgcacgatt aagacataac aacaagaaga aac 403

<210> 1933  
 <211> 413  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-038-Q1-E1-A3  
 <400> 1933

gtcgtttcca atagagaccc gttgcaactt ccttggaag acttgaacat cgatctggtg 60  
 atagaagcaa ccggtgtttt tgtggattcc aaaggggcac ggaaacacat acaagcagga 120  
 gccagaaaag tactgataac tgcacctgga aaaggagatg acgtgggaac tttcgtcatc 180  
 ggagtaaagt aacacagcta tgatcatcaa gtacacaaca tcgtgtctaa tgcaccttgt 240  
 acgaccaact gcttggctcc atttattaaa gtattgcacg aagaatttgg tattatcaaa 300  
 ggtacaatga caacgacaca ttcgtacact ggtgaccaac gattgttga tgcagcacat 360  
 agagacctta gaagaacaag ttctgtgca ttaaataacg ttcctactac tac 413

<210> 1934  
 <211> 239  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-038-Q1-E1-A6  
 <400> 1934

aacttgtatt agtagtcac aacgtattag gtgcagaagg tgcacttcga attatggctg 60  
 cgaatcatga ctacgaagac tatgtcgaca ttccttgaat gttctctaca caacaataac 120  
 aacggctcct gaataaaaca actcgttggt ttttattcac aacaaaaaaaa ctcaaataaa 180  
 aaaagaaaaa agaaaaaaat caagaacaaa tcaaaactgg aaaagtcaaa aatttttct 239

<210> 1935  
 <211> 333  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-038-Q1-E1-A8

<400> 1935  
  
 acggacgcgt ggggtgcaatt ggtgaacaat agtaagagag agagaattgg ctctcgttct 60  
 tgtgacatat atatatatct atatatacaa atatacatta agccttagat atttacatct 120  
 atagtataaa atggtatttc ggaggtttgt agagattgga agagtcgtcc tgggtgaacta 180  
 tggcaaagac cgaggcaaac tgggagtcac tgtggatgta gtagatcata atagggcggt 240  
 ggtagatggc ccactcacgg gacttgcgag ancaaacatc aactggaaga gcttaacggt 300  
 gaccccggtc aaagtanaga ttcaacactc cag 333

<210> 1936  
 <211> 287  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-038-Q1-E1-A9

<400> 1936  
  
 acgcgtccga ttgttttctt ggtagcagtt gtacattcaa catcatcaaa atgcaaaagg 60  
 aggaaagaaa agatcttcaa aagaaagaag cacaagtaaa cctgcagcag cagatgctac 120  
 aaagacgaca gaaaagtctg gtccggaagc caagttgaag ggaactggtg caaagaaaca 180  
 ataaaaagtt gactatgcat gtgcagtcct gttatgtttt gtgagttctg tttgatagtt 240  
 tccagctatt cttttggtag tgaataaaga gaaaattttt tatattt 287

<210> 1937  
 <211> 419  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-038-Q1-E1-B10

<400> 1937  
  
 ccgacccgtc cgaggacgca tgggaggacg cgtgggcgga cgcgtgggct ccacaggcca 60



tcataaaata tgtcaaggct cacaatccgc agcttccgga agacaaactt aaacttcaag 120  
 taaagtttagc tttgcgtcgt ttgttaaagc agaagcttat tgagaagggtg aaagcttcgt 180  
 ataagattgc tagcaagagt agtagagtta agaaagcccc aaaagaaaca aaagcgaagc 240  
 gagttgcgaa aacgggttcaa aagaaacgag cgaacgattt gcaagagaaa actacgaaag 300  
 ctaaaaacgg taatgtgaga aaagaaaagc agaaagctcc agaaccccc aaggctcccc 360  
 ttaagagtga gaccacggag accaaatcct tgaggcacgg tactagtgcg gattcaaag 419

<210> 1938  
 <211> 389  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-038-Q1-E1-B11  
 <400> 1938

gtccgaaaga attataagcg gtgcaggatt agaagagacg acccgaatca agttcaactg 60  
 tacttgctg tgtgtattca atggaataag taataagtgt tgattggcct tgtaactttg 120  
 ttgaggtatg taaacaaccc ttgatgtccg tcaagagggt gatgaaaaaa atcatgcgcg 180  
 tcgacagaag tggtagcatc tgcgtgtttt ggtaccgcat atgaagatgc cttgctaagc 240  
 tgactctttc atcgtgctag agttgtgcta taacttttta aaacttgttt taaccgttgt 300  
 tgagactaag tttgttggtt atttgggttt tatatatata tatatatata tatatatata 360  
 tatatagaga gagagagaga gagagagag 389

<210> 1939  
 <211> 382  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-038-Q1-E1-B12  
 <400> 1939

gtccgagact acagaccatc caactagtgc aaatgatgac actcagaatg ataatacgat 60  
 ggaaactttg gaaggagttg aaaaggagga gccgagaaag acaggagcgg aatggcgagt 120  
 agatgaacct gccaatgcaa ttttgcgtag aaattatgat catccgaaag gaacagtttc 180

tgtggatagc gagtcacttc gagaagagag aattgccgag tggttggaag agaataccaa 240  
 atatgagggc caaggctcgtt atcggtgttc tcttcctcct tttaagctat ttcaaggcaa 300  
 agaatatgtt cacaacatt tgaaaaccaa acatacggaa gaaatgcana aagtgataga 360  
 gaaagcagac aaggaacaat tt 382

<210> 1940  
 <211> 321  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-038-Q1-E1-B2  
 <400> 1940

agttccaaag gaacaagggt ttatctcttt ctggagaggg aacatggcaa acgtcatccg 60  
 ttactttcct acgcaggccc ttaactttgc tttcaaggac aagtacaagg ccatattctt 120  
 ggagggaggt gacaagaata agcagttttg gaggtatttc gttggcaatc ttgctgcagg 180  
 ggggtgcagct ggtgggactt ccttatttgt agtgtatcct ctggactttg cccgtactcg 240  
 acttgccgca gatattggga gaggcgaagg tcgtctctac actggcttaa ttgattgttg 300  
 tatcaaaacc gcgaaatctg a 321

<210> 1941  
 <211> 357  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-038-Q1-E1-B4  
 <400> 1941

accacacgtc cgcttccgac gaagagggtt tttggatatt tggctatggg tctcttatat 60  
 ggaaagccga atttccttat gtacggacag tgaaagggtg cgtgaaaggc tgggtgtagaa 120  
 ggttttggca aggttcgata gaccatcgag gaactcaaga tgctccagga agagttgtta 180  
 ccttggtccc tgctgagaag attcgagcaa tgggacaagc ataccgaac gagtcttttg 240  
 ttacttgggg tgtaggctac caaattgagc aagcacaagt tgaaaaagtt ttgcagtact 300  
 tggactatag agaaaagaat ggttattcaa aaattccggt tgctaaatat gaacaac 357

<210> 1942

<211> 464  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-B6

<400> 1942

ggatataggtc tagaagtccg ggtcgacca caagtccacc cacgcgtccg gtaagaacaa 60  
ggaaccttaa ctgaaagctt gaaaacgatt gtactgtaga gctgttctat tcatgggtgt 120  
atttcacctt ctaattgtgt atatctcaa agatgggagc aaagtctaga cttttgaaac 180  
gaaatcaatt gttcataatt ttgcatactt gttcaaagca ttgcaacatt aggagaactt 240  
catttgggtca tggtcacgat gatattgctc actagacaag gaaatacatc acatcgacg 300  
aattgaccac atgacattgt cgctactgtt gtatagggtg agttatgtgg aatattttga 360  
ctttgttatt ttgttgacg caactggctg tcgctctttt ctttatgtac atatacaagc 420  
attctcagac tgcctgaaaa agtttttact cgtcatgggt ccct 464

<210> 1943  
<211> 296  
<212> DNA  
<213> Cyanidium caldarium

<223> unsure at all n locations  
<223> Clone ID: LIB190-038-Q1-E1-B9

<400> 1943

gagacattcc tcttcatcat agacatttcg aatgcctcca aagctatata agtagcgtat 60  
gcaagaaaga aaaaggtaaa ggaagaaagg aaaacagaga tggactatga gcgagaaggt 120  
ggatagtcga gaaggaaaaa gccagaagc caagataagg tatcaaagta aagaaagaag 180  
gaaaaggaga agaagagaag gtaggcttan aagcagcana ccagagaaga aagcgtaaa 240  
gcatgaaaga aaagaaatcc gaaaaagaag agaaaaaggt aagaaagagg accgaa 296

<210> 1944  
<211> 399  
<212> DNA  
<213> Cyanidium caldarium

<223> unsure at all n locations  
<223> Clone ID: LIB190-038-Q1-E1-C10

<400> 1944

tccgatgtga aactgcagta aactagcagt aggacggaaa gaccccataa ttcttgacta 60  
gataggttta gggaggagag agaatcatga agtagaggag gtggggtaag agatgaaaga 120  
ccactgcatg aggataagga atctaactga gtaaggaaaa taagcttaag ctagtttggc 180  
tggggaagta aagcctaaga aagagtaaata taggcaagca aaggcatgag agaagtataa 240  
tagcagaagc atgcttgaag aaaaagaaag agatttcaga aagggaagaa aagtcagcta 300  
tagagaacag gtgaaggaga actcgaaaag aagagaaaag ccgtactgaa gaccgacaca 360  
ggtactcgan gagaaaggag acccaaatta aggtgagag 399

<210> 1945

<211> 348

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-C11

<400> 1945

ggaatgtttg gcatgcaaca cgcccggtga cattcaacat catcaaatgc caaagggagg 60  
aaagaaagat tcttcaaaga aagaagccac aagtaaact gcagcagcag atgctacaaa 120  
gacgacagaa aagtctggtc cggaagccaa gttgaaggga actggtgcaa agaaacaata 180  
aaaagttgac tatgcatgtg cagtcctgtt atgttttgtg agttctgttt gatagtttcc 240  
agctattctt ttggtagtga ataaagagaa aattttttat atttaaaaaa aaaaaaaaaa 300  
aagaaaaaaaa aaaaaaaaaa aaagaaacaa taaagagaaa agagggaa 348

<210> 1946

<211> 285

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-038-Q1-E1-C12

<400> 1946

gtccgattct tcagccaac agagttcgat tggaacaaga ggactaggta atgagttttc 60  
gcaagttacc gtgcagaaag tcncaagtca tatttcacgc tctaatagaa attgtatgga 120  
aaagtttcga ttttcgggac gtgaatagaa gaaaatgagg caagaaagga gatagaatag 180

caagcgttat gtatagaatg caattttgca ttgagcgagc aagctttcaa cccttcttag 240  
cctcncgagt actttttaat tcataaatat ttaatttttt tocac 285

<210> 1947  
<211> 432  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-038-Q1-E1-C3  
  
<400> 1947

ggtcgagcac gcgtccaggc agagaggcat gggatttgca gagttcgaac gctcttatga 60  
gaagtataca ggaggtgatc catcgagaat gaaagtgtcc gtggagaaac tagacgaaga 120  
gccacacgac gatcatagag gttccacttc ataaaagaga ctattgtgca catttgtata 180  
ttcctttgcg ccgttgtttg agagacaact attttttgcc gtggtcttgt gaggaagaga 240  
aggaggcgta taaccggtgc caaagaaaag agagaagaag aagagaacga ctctataaga 300  
aaatcaagga agaggcctcc aaagtatcgg cgacggaaga acaagatgaa taatatcgtg 360  
ttggtgcgtc gtctttgtgt tggaacaata ataactctc aaatagtaaa caacttgatt 420  
tgattttcaa gt 432

<210> 1948  
<211> 340  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-038-Q1-E1-C9  
  
<400> 1948

tccaaacatc cgagccacgc atccggtaca atgtaaaaat gcacatacgg gaaagcatca 60  
taaaaaaaaa aaaaaaggaa aaaactgaag tatcaggaaa aaaagaggga gtagatgagg 120  
aaagaaagat caacgaagta agagtaagag aacgagtaat gtgaatgaaa gcacgaaagt 180  
atttgaagaa gagagtgtaa agcgcgtacc ttttgcataa tgtcccagcg agtgaaagag 240  
gaagcaaaaa gaaagaaaaa gaagtagcca ggtaagaccc gaagctagtt gatcttatgc 300  
tgtccaagcg aagtaaggct gaaccagtat ctgtggaaaa 340

<210> 1949  
 <211> 419  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-038-Q1-E1-D10

<400> 1949  
  
 cgtccgatct ttgagtanga tactatatat gcttgtggaa gaatctagag caaagtggca 60  
 ttggaaacct agaggaggaa gtagcagcgt tcattctgtg tcatttcaca aatagcaggt 120  
 cttcaatttt ttaaacacat ccctactatt aggaacgaaa tgaacgcgtg gaactttctg 180  
 aaggaaaactc gagaaggact acaactgttg tccaagtcac tcagtggcac acgtgaaata 240  
 gtaaagtttc gatgcgaatg aaaataggtt ctagttctcg atgtggagca aatgcctcgt 300  
 tctataccag aaaacatgga tatctctaga gtctgaaagg gattatctgg tgtccaggag 360  
 gcggttttca acgaggtgta cattccacag tcctcgctcg cttctagaaa cgagcaatc 419

<210> 1950  
 <211> 362  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-038-Q1-E1-D11

<400> 1950  
  
 acatccgaat ggtgttacca aatgtaaaac ttgcaacggc caaggagttc gagtacagat 60  
 aagacagatt ggaccgggaa tgggtgcagca aatgcagtct gtgtgtcctg actgtagtgg 120  
 aagtggagaa tctatcaagg agaaagataa atgtaccaag tgtaagggtc aaaaagtgtg 180  
 gaaagaaaga aaggtattgg aagtttatgt ggagcctgga acagagcacg gccaaaagtt 240  
 ggtattttct ggggaagcag atgaggagcc aggaacgggt cctggagatg tgattgtagt 300  
 aattcagcag aaagaacatg agatattcaa gcgaaaagga agtaatttaa tcatggaaaa 360  
 ag 362

<210> 1951  
 <211> 370  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-D12

<400> 1951

caacgataat cgaggagcag catacagacc gagaaaatgg ccaatacaag gaacacttgg 60  
aatatgtggt tacctcaagg tggactcaaa acaagttgca agatagtga ccttgagttg 120  
tgcgggaaaa cccatgggta gacagtagaa caagtatgta tcttgcttca tatatcgta 180  
caggacggtg gaatgtgggt tgggtgtctcg tccaacaaga ggcacttggc aacaagaatt 240  
ggggtacttg cagtagaaaa ggtccccttg gaagaaaact agatagtaga ttttataaat 300  
aatctcattc ccattggaaa aaaatgttgt gatacacaag ttgtaaaagt aaaacgttta 360  
cttgagatac 370

<210> 1952

<211> 407

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-038-Q1-E1-D4

<400> 1952

cggggtcgagc acgcgtccaa gagaatcgtc atgcttcgga tctcaacgag gatacttgtc 60  
actacagaac ggatagtaga gtacccgaaa atgtcatagt tcgaaaagat acaaacgtgt 120  
cttttttgga tttgtgtctt tttgcctttg atcttttgat tagtcgtctt agacactttt 180  
cggagccttc ttgtccagct tccataccag acacggatga ctatgcactt tttgtgacgt 240  
ggaataagaa aggtagagaa ggtgagcgtg cacagttgcg aggttgtata ngaacgcttt 300  
cacctttgaa ccttcgaaaa gggatacata cttatactct agcaaggtaa gtgactccga 360  
actgaaacta tgaaagggag ctcaaaagct gcaagtgctt tcagaga 407

<210> 1953

<211> 432

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-D7

<400> 1953

acgttcgggt acatcgctgt cgtcatgcag ccatatttgg cactatcatc gcaattcttt 60

gtcaattctc tggaatcaat tctatcaatt attatatggc aactctgatg catgaagttg 120  
gatttagtcg agtgcacgca gtatattcaa gtatgattgg tagtggaact ttattgttgt 180  
ttaccattcc tgccatttac ttgatggaca gaatgggaag aagagtgctg tggttaagtt 240  
tattaccagg agtgctcggt ggatgtttca ttataggctt tagtttccga gctagcaaca 300  
tccatgtcga agaaggaatt tacatttggg gtatcataac atattatatg ttttgggggt 360  
ctggtatggg accttatgct tgggtactgg gatcggaat atatccaact tatattcgaa 420  
gtgaaggaat gg 432

<210> 1954  
<211> 433  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-D8

<400> 1954

cccacgcgtc cgaaggcata tgggtgcgggc ttgctgtcat cttttggcga attgcaatat 60  
gcgttgagta aggaacctca gttgttacca tgggatccct ttgtcgcac caaacaaccc 120  
tatectatca cccaatatca gccagtgtat tttgttgccg atagtttttc ttccgcaacg 180  
gacaagtttc tcaagtttgc ggaaacgata gccagaccgt tttccgtttg gtacaatcct 240  
tactgccaaa ccatcgaaat tattgactcg ttggaaaaga ttatgaaaat agctggacat 300  
accaaacaat cgtgttcggt ggtgacggaa gctttgagaa gattggtgga aagttaaagg 360  
taacgtatta gattaagcaa aaatagaaag gatttggtgg ttgtgagtgt tcatgcatga 420  
tggtttgtga tgt 433

<210> 1955  
<211> 336  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-D9

<400> 1955

tgcaggcgcg tgggctgacg cgtgggggaa attgcatgaa gatgaacaag atatgggttg 60  
gttggtggtt gaccttgtgt gttgttgtcc tggtgcaagc aagtagcagt tgttcttcca 120



caaggttcga ctctgctaatt ttgccttgtc aactttgtgc ggcaatacac cacatacaaa 180  
tagctactga ttgccgaagt aaatggacta accctgtgac tggtcataat cggagtaaac 240  
acttgcaaga ttgttggttca gagagtctat gtgatgtaca agatataaaa tatgtgaaga 300  
ttaaattggt ggctccaccc aaacagttcc ttttgt 336

<210> 1956  
<211> 385  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-038-Q1-E1-E12  
  
<400> 1956

tccaagcgtc caggattgga tcccctgagc cgccgcttgg ggtccgtag ttgcagattt 60  
gggtcaaaat ataaatcaac ttgtgataaa tgtttttgga aattatgtcg ttcaaaaatt 120  
gttggaatat ggtgatgaga atattcgta attgttgaca aagaagttgg aaggacacat 180  
gctttcattg agtttgcaca tgtatggctg tcgagtagtt caaaaagcct tggaagtatt 240  
gaaaggggaag gaacgaacca tgttggtgca agaattgaat ggacatgtgc ttcaatgtat 300  
tcgtgatcag aacgggaatc atgtgattca aaagtgtatt gaattggttg aaccagagag 360  
cattttattt atcgtcgaat ccgtc 385

<210> 1957  
<211> 425  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> unsure at all n locations  
<223> Clone ID: LIB190-038-Q1-E1-E6  
  
<400> 1957

acccacgcgt ccgcccacgc gtccgacaga aacagccaaa atatttgctg gtgtggatgt 60  
tacgaaagaa cctattcctg ttcttcctac agtacattat aatatgggag gtataccaac 120  
caactggaaa ggacaagttg tgacgttaaa agatggaaat ccaaatagtg ttgttcccgg 180  
tttatatgcc gctggagaag ctgcttggtc ttcggttcac ggtgcaaata gattaggagc 240  
taattctttg ctggatattg ttgtctttgg aagagcctgt gctcgaaacag ttgcagaatt 300

atataagcct gaacaaaaac aacctccttt accggcagat gctggagaag aatctatagc 360  
tagattggac anatatcgac atgcaaattg aagccttana acaagttgaa atcgtctgca 420  
catgc 425

<210> 1958  
<211> 412  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-038-Q1-E1-E7  
  
<400> 1958

atgaaaaaga aaagttgttt gaggaccaa cagagtgaca agaagagatg gcaaggagaa 60  
tattgggtgc ttatatggga gatgccacag tggcaactct gttcagtatc aaaattttgt 120  
tctatcttac tatcatgggt ttctccataa ctatcttggc tctcatggga aagaactcgg 180  
atgggtatttg gatacatagt gtgccacctg cagatcaata ttgtgcatac aagtcttcat 240  
tgagggtgaa ccaccatgga attgcttctt attgcaagta tatcgttgcc gtagctgcta 300  
ttgggttggt tatctcgttt ttccagtttt gctacggctt gttgggtatc tttttcaagt 360  
ggcaacaaaa gttgtggtat attgaagatg ctttcaatct atttttctgg gc 412

<210> 1959  
<211> 289  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-038-Q1-E1-E8  
  
<400> 1959

aatgcattca acatattact cactttgatg ttcgttcgac gagatgaaag attagtacaa 60  
gcaacagtat ttccggtatt tgtttttctc tcaaacgcga agagtttctt ggttcctcaa 120  
atgattcttt aatgacctgt taacgactaa atgatttttc acgaggttgc aaatataatg 180  
gtcatcataa tcaatccagt ctgctataca ggacctttta ttcagatcgt tcacatatta 240  
ctagtggctc tgaagataaa gcggtatata tatttgccat gtccacatt 289

<210> 1960  
<211> 243  
<212> DNA

<213> Cyanidium caldarium  
 <223> Clone ID: LIB190-038-Q1-E1-E9  
 <400> 1960

tccgatcgta cagttgtcga tcgttccact ggtacgtacc atttattgag tgatcctagc 60  
 gatccgttca atccggtagt tctcagtatg gatatgttgg aaccacaaga agacatgata 120  
 ggaacgattg attagtatat tgcattctaaa aggaagaatg aatagaacac accactattt 180  
 tattcttaaa aaaaaaaaaac tattgtcaat aattttcaac gctactgtaa aaaaactcat 240  
 gac 243

<210> 1961  
 <211> 372  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-038-Q1-E1-F10  
 <400> 1961

tctaggtggt ttgcgagcga agaaaaccaa gcgattggtg gagactgcaa aggaaaccag 60  
 ctgcgctggt tatgagttgt tgaagagttt agaactaagg ctgcaaacaa ttgtatttag 120  
 aacaggctat tgtaagagta tgagagctgc ccgtcaacta gtttctcacg gacacgtacg 180  
 aatcaacggt gaccgtgtgg ttcaaccaag ctatcgtgta aaagaaggag aattcattac 240  
 catcgatcca catataggaa tctgtaggtt acctttcatt ccactcttcg acccgaggagc 300  
 taaaaagttt aagaaaccag aagattgtga tgtttatata agtcccccta tcttctcgta 360  
 cnacaaaaat at 372

<210> 1962  
 <211> 327  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-038-Q1-E1-F3  
 <400> 1962

cggtcgagca cgcgtccgag atttagccaa cggcgtcgtc gtttcccatg ccaaagaca 60  
 aaaaagaagt ggacaaggca aaaaagcag ctacggctgt aaagtctgga ttgaagaaaa 120

agaaagggtca taagataaga acaaagggtcc acttccaccg accgctcact ttgagattgc 180  
 cgagacaacc aaaatatacct cgcaagtctt ttcccaaaaa accagcttta gatcaattca 240  
 aaattattcg atataccttta acaacagagt ctgctatgaa gaaaattgaa gatcacaata 300  
 ctttggtttt cttatgacgac gtgagag 327

<210> 1963  
 <211> 330  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-038-Q1-E1-F5

<400> 1963

agccataaca gagttagata ctctttcggg agagagttac aaggactcta ctctcattat 60  
 gcagttgtta cgtgataatc ttaccttgtg gacttcagat atgggcggtg aagaagatgg 120  
 aaacgcaacg aaaccagacg gaaaagttga accagacccg aacaaaaagg agtgatagat 180  
 aaaagcatgt gcgatatgtg tgtttttggt ttctgactcg cacattgctt ttgcacgata 240  
 agaagaaaga aagagagata gttgaatatg cagacagat gaatttgttt taagacgaca 300  
 caacctgttt ggcaataaaa aaaaagtgat 330

<210> 1964  
 <211> 380  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-F6

<400> 1964

acggacgcgt gggttcaaag caacttatct tcaatagtaa tgacgccaca agggacgata 60  
 agcttgtctt atacagacaa gtgctcttg aaattcgac cagtttactt caaatgtctt 120  
 tccatcaact ttgtttcagg tctatgtgga agagaaaaga gagaacactg tatttgaaag 180  
 ctgacctagt acaactggtg catcttgccg agttgaggtg aacaattcaa atgaaatgaa 240  
 tagtctcaag taccggaata gggtcacaag gtaatttttt agcagtcact tggtttcgtg 300  
 acagtggaaa accgcagtga aaagtttgtt gatcaatacg gcgaaaggta taacaacgga 360

aatttcttaa cgagaaacat

380

<210> 1965  
<211> 324  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-038-Q1-E1-G1  
  
<400> 1965

aaacagatgt atgattcagg caatgaactg acgcattata tcatataata acacatgcaa 60  
gtaggtaaag cgaacgggtg attaaatacg tgttacataa tgcgagacca tcaaagcata 120  
gaacaatgta acaaatgggtt acagtaaaaa ccatagacga agtatacgcg ggaatctcac 180  
atgaggaaag ccacattggg actgacaaat ggtccaaata agataagtca gcactgggga 240  
aaattcggca ctgtactcga aagtatgacc cagtaatgac gattgtatta aacagaatac 300  
gcagtaaaat gatgtaatca acgg 324

<210> 1966  
<211> 414  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-038-Q1-E1-G10  
  
<400> 1966

gtccaagcgt ccaagcagat ctgtgagcat cggctgaagc atctctggaa gcttacaagg 60  
cagcaagtga gatagcttcc accgaattgg ctccaacgca ccccatccga ctcggtttag 120  
ctctgaactt ttctgtcttt tattatgaaa ttatgaattc tccggatcgt gcttgtcagt 180  
tggcaaaaaca ggctttcgat gatgccataa cagagttaga tactctttcg gaagagagtt 240  
acaaggactc tactctcatt atgcagttgt tacgtgataa tcttaccttg tggacttcag 300  
atatgggcgg tgaagaagat ggaaacgcaa cgaaaccaga cggaaaagtt gaaccagacc 360  
cgaacaaaaa ggagtgatag ataaaagcat gtgcgatatg tgtgtttttg gttt 414

<210> 1967  
<211> 422  
<212> DNA  
<213> Cyanidium caldarium

<223> unsure at all n locations  
<223> Clone ID: LIB190-038-Q1-E1-G11

<400> 1967

gtccgaccac gcatccgatg gtgtataacc agcaaatatg atcagaacaa cgaaaaacat 60  
cgccaagtaa agttcaatat tgaagaagga aatgggtcttc cggatacggc tactacggag 120  
gaagtttttag aaggggttgaa ggatgcaggc tttgaattga tcgatgccta cgatttggcc 180  
gaatatctgg aaactccttg gtatgctcca cttagtcca gtttttctgt gaatggtttc 240  
cgtcataccc gattaggaca ttatgtaaca catatttctg tgcggtttct tgaaaagttg 300  
ggattatttc ctaaaggctc atctcaagtc agcaagttgt tgatgaatgc agctcgtgac 360  
cttgtggaag gaggtaaatt angcatttat actccgatgt anctttttgt ggcaagaaag 420  
cc 422

<210> 1968  
<211> 359  
<212> DNA  
<213> Cyanidium caldarium

<223> unsure at all n locations  
<223> Clone ID: LIB190-038-Q1-E1-G12

<400> 1968

tgagaagtat acaggaggtg atccatcgag aatgaaagtg tccgtggaga aactagacga 60  
agagcagggtt ccacttcata aaagagacta ttgtgcacat ttgtatattc ctttgcgccg 120  
ttgtttgaga gacaactatt ttttgccgtg gtcttgtgag gaagagaagg aggcgtataa 180  
ccggtgccaa agaaaagaga gaagaagaag agaacgactc tataagaaaa tcaaggaaga 240  
ggcctccaaa gtatcggcga cggaagaaca agatgaataa tatcgtgttg gtgcgtcgtc 300  
nttgtgttgg aacaataata actcctcaaa tagttaacaa cctgagttga atttcaagt 359

<210> 1969  
<211> 441  
<212> DNA  
<213> Cyanidium caldarium

<223> unsure at all n locations  
<223> Clone ID: LIB190-038-Q1-E1-G3

<400> 1969

gcgtccaacc acacgtccgc ccacgcgtcc ggatttggcc aacggcgctc tcgtttccca 60  
 tgccaaaaga caaaaaagaa gtggacaagg caaaaaaagc agctacggct gtaaagtctg 120  
 gattgaagaa aaagaaaggt cataagataa gaacaaaggt ccacttccac cgaccgctca 180  
 ctttgagatt gccgagacaa ccaaaatata ctcgcaagtc ttttcccaa aaaccagctt 240  
 tagatcaatt caaaattatt cgatatcctt taacaacaga gtctgctatg aagaanattg 300  
 aagatcacia tactttggtt ttcttatgcy acgtgagagc ttccaagcca caaatagcgc 360  
 acgcggtaaa gaaaatgtac aacattgtgg cagaaaaggt gaacacctta atgaggccgc 420  
 acggacagaa aaagcttatg t 441

<210> 1970  
 <211> 383  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-038-Q1-E1-G9  
 <400> 1970

gtccgagttt ttagtaaaag ttttcattca gcatggctcc taaaggtgct aaaagtgtac 60  
 ccgttgcagg taaaaagccg gtggcaaaag ttgaaaggaa gaaatcaaag aagaagatcg 120  
 gagacgtatt ccatttatat atacaaggtt ctgaagcaag ttcattcctga caccggaata 180  
 tccgcaaagg ctatgagcat catgaattcc tttgtgaatg atatttttga gagaattgcy 240  
 tcagaagcta gcaaattagc tgcttattcg aaaagcaaga cgcttacttc gagagaggta 300  
 caaactgccg ttcgtctttt gttaccagga gaacttgcaa aacacgctgt atcggaaggg 360  
 tacaaagcag ttacanaata cac 383

<210> 1971  
 <211> 393  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-038-Q1-E1-H10  
 <400> 1971

aacacaaata tgagtatat tgcaccatcg atcctcatta ggacgctgtg atgcgcaaga 60

gaagaaagat gagacagcgt tccaagtaac ggaagaattc ctcggacgtc tgagttgaat 120  
agagttccta aaacgtggaa aaactctttt tgcaactctg gcgcagtgag tataccctgc 180  
tacggaaggt tggaagtgtt tccgaggatt gttcgcaagt tatgataaaa ggttcttgtg 240  
gttaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa taaaaaaaaa 300  
aaaaaaaaaa aaaaaaaaaa ataaaaaaaa ataaaaaaaa aaaaaataa aaaaaaaaaa 360  
aataaaaaaa aaaaaaaggg gggccccccc aaa 393

<210> 1972  
<211> 404  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-038-Q1-E1-H5  
<400> 1972

agcagcatga gcagttggaa gtattatggc aaaacataaa ggcaacaatt tttcccgtcg 60  
aaaatacttc aactattcct tgtggatggt tgaatccata caatctttct acacctatag 120  
gaacaaagag tttgggagtt cagaaacaag cttcttggtc cagcgaaact acttgtgaac 180  
gtagacgtta cagtatagaa aacttggttg agctttctag tcgtccttat ccaaaccctc 240  
cagcgcataa aactaagaaa cgaaaaagag aaatagagga agaagagaaa cagtttacat 300  
taccagactc agatgtgcgt aattgacgat attgtcgtaa aaggaaagaa tagctctctc 360  
acctttgaag atatgtttct ttgcgatgcg ctaattgctg gtct 404

<210> 1973  
<211> 451  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-038-Q1-E1-H6  
<400> 1973

cccgggtcga ccacaagtc catccgtgt caacgagctg tttctctggg tatcaatctg 60  
gcgtcgtaa ccaaaatatt aaagtgtgca ggaaatgat acagtataac gctaagagca 120  
gacgacaagg gagataaggc ggagtttgtg tttgaaagtc aaacgcaaga cagtctttct 180  
gagtttgaac tgaaactgat ggacatcgat tcagagcatt tgggtattcc tgacacaaag 240



tacagtgcag tcgttgaaat gccttcttca gaatacagac gtatctgttc cgacctaggg 300  
 gtgatgggtg ataccgtgag gatatccgtc tccaaagaaa gtgtcaagtt tcaagtggat 360  
 ggtgatattg gcaaggggaag tgtctgtcta catccatctt ctgtgggtga taagcctaca 420  
 gaagttgtga aaatttcctt ggaagaacct g 451

<210> 1974  
 <211> 370  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-038-Q1-E1-H8  
 <400> 1974

accacgcgt ccggaacat gaaaagattg tcatangaaa gtggagcaaa gactttttca 60  
 gacatttgag ggttatgcct cctcctctc ctcctctca atcctctata tcgacgacca 120  
 ttactggaaa agctatttgt agttatgttt ctgcgctatt agaagaaaga gatcgcgtan 180  
 tgaatgctat tcgaaagcat taagttccta gttgtatgtt tacagaggag aatgattcat 240  
 aaacggtttc cagcaaagag ctatcaattt aacttggagt tatgatgcct ttgttactgc 300  
 ggtttgggtcg agagaagatg ttcacagggt gtttcctaaa tattgtgaac ctccttctcc 360  
 acctctacct 370

<210> 1975  
 <211> 405  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-039-Q1-E1-A1  
 <400> 1975

accacgcgtc cggttttcga cctccgaata aatttcggtt ttggcgctt gtcccgaatg 60  
 tctctcggtt caaagtcttt tgatcctctc atacaaataa gaatcgactt gactctctcc 120  
 ggaagaaggt tcgtcgacac tttcttatgg aatatagaag aatgggagga ttctatgcga 180  
 gcgttcgcaa gaactatagt agtagatact tctttgcctc actcggcgga ggagcaaatt 240  
 gtttcaagca taaaagaaca agtggcgggt tacattccct atcgttctca agaagaagan 300

acaggagaaa gaagacacat tttaaagcta gacattcgta tagggaaagt agtactaaga 360  
gaccagttcg aaatgggacg aagcaatgcc gataactctc ctgaa 405

<210> 1976  
<211> 406  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-039-Q1-E1-A11  
  
<400> 1976

gacccaaacg tccggtagct ttaagtatgt tcaataccga tgaatcgata agaggatttg 60  
caaagtccttg tttcgaattt gcagctgcta ggaaactgcc cttgttccctt tccacgaaaa 120  
ataccatttt gaaaacgtac gatggaagat ttatggaaat attcgaccaa gttcgtaggg 180  
aatatcctca tggttgcttat gaacaccgcc tcatcgatga tatggtagcg caggcattaa 240  
agtcgagtg aaactttgtg tgggcttgca agaattatga tggagatgta caaagtgata 300  
tcattgcaca aggtttcgga agcttgggaa tgatgacgag tattctcatg gcgccagatg 360  
gcaagacggt ggagtcggag gctgcgcacg gtacgggtta cagaca 406

<210> 1977  
<211> 410  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-039-Q1-E1-A2  
  
<400> 1977

atacatatcc ttgtttttat tggatatttag tacagtgtct tggacggtgt tttatcgcta 60  
tttacaaggt tcgaccacag aggactcggt cataaataac gatagcgagc tgtattcgat 120  
agtcgaacag gaaacttttg atgaagcaac acattcacgt gctacggatc acacagcgca 180  
ttctccagca gttggtccac aaacaagtac agctgtgccca tcggatgccca aacaacaact 240  
tcatggagac aacttggtat cgccacctac gaatacagaa ataggaatgg aagatacttg 300  
gaataacacg tctcgttata tgtctatatt atactatagc tggataagat ggcgtcattt 360  
attgcattcc tgtcgacatt gggctactcc tccctcgatt gccatcgat 410

<210> 1978

<211> 416  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-A3

<400> 1978

gcaaggagat caaaagttat tacaaagact tgtacaacat aaagtagttt gtgaaagtga 60  
cttgataaaa tggtttcacc aattcgtatt gcaatccgca cgtggaaata acaacaacaa 120  
ccagacaggt ctacacagaac agttgaaagc tcgcttggtc caatacaaag caaaactgca 180  
gttggttacgt ttgtcgctaa atagtatatg ggtacaagaa agaataactt cttattgggtc 240  
gattgtcaat gcacgagatg acagaattgc gcaaaaagtg tgcaaatata ggcatacaga 300  
tattttgggtt ttcaaaacga tgggtggatta tgtattgcaa gaaaagaata gtcccacgga 360  
gctgatagat aagcgtgagt tggtatcgtc gttggatagt ctcaaggaaa agagac 416

<210> 1979  
<211> 361  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-A5

<400> 1979

cccacgcgtc caccacgcg tccggcttaa aattgaggggt ctttgactgg attgaagtca 60  
accatgtcag taacgctact taacctggt gcggaaataa gcaaacgcgg agtcgcgttg 120  
tacactacta ttaacgctgc gaaaggacta caagatgtgc tacgttcgaa tcttggtccca 180  
aagggaactc tcaagatgct cgtttcgggt gcaggagata ttaagcttac aaaagatggg 240  
aaaattctac tggaagaaat gcaaatccag aacctacag cttccttaat tgcacgaacg 300  
gccactgccc aggacgacat ggtccgagac ggtacgacaa cttgtgtcat actgactggg 360  
g 361

<210> 1980  
<211> 291  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-A6

<400> 1980

accacgcgtc cggccacgcg tccgcgcacg cgtccgcca cgcgtccgca gaagaagtca 60  
acagtgtgcc tcgtggatag aaataaactt tatcttatta tgctcaatgt acactactaa 120  
taacactgaa aggcagacta cacgaatgtg ctaagttcga atcttgggtg aatgggaagt 180  
cacaagatgc tcgattcggc tgcaagagac atttactga cagtcgatgt gaagcttcta 240  
ctgtgagaaa tgctgtcga taaccctaca gtttccttag ttgcacatcg g 291

<210> 1981

<211> 435

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-A7

<400> 1981

aggaggattc tgtgacgtat cctagaggca tcacggccag aggatataac tcagttatat 60  
gaagttctta gacatcgagt gcctaagcga gtcctaaagg aagcttaatg acctcgaatt 120  
aacggactat cgtgttcggt gtcaattgga agcttattcc tgtaaaccg caggttttga 180  
caaaaaattg agcaaatcgt tggagcaaag gttgttgga caacttgaag cttctccaag 240  
ggcattccaa gcgtctcccg tgggctcttt agaagaccaa agtgcccgca agacattaat 300  
caacctcatt tgcacactga acgctgcgca ccaggattac gactttagct cgctgcagct 360  
ttcaagactg aaacgtgtcc aagatgtaca cgcacttcag cagcacgtcg actcgctgtt 420  
tgagcgcttt tacag 435

<210> 1982

<211> 418

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-A8

<400> 1982

agagattttg tggttcaatg gcttttgttg caactagtgt gatcataccc acaaagtgtc 60  
gtttacaaaa gaaagtatca catattccct cgtatttgtg gaggatgagt tgggttgcaa 120  
ctttaaaatc ttccaaaata gaaggctcct ctgctattcc agaaggtgaa cagcctgacc 180

tccatacaaa gtgggagcag tgtttacaag agaaagggtc accagagtgc caacagtgtc 240  
aaggttcaag acaaatacca tgtcctgcat gtgaaggaaa gggttatttc gtgatggaag 300  
ttttcaatgt tacctctagt aaccagtgtc aagtttgccg tggacaccgt aaaactcctt 360  
gcccaacttg taaagaatac atttatcggg cagtaaaaga tttatgatat aaagtata 418

<210> 1983  
<211> 401  
<212> DNA  
<213> Cyanidium caldarium

<223> unsure at all n locations  
<223> Clone ID: LIB190-039-Q1-E1-A9

<400> 1983

cgtccacca cgcgtccgcc cacgcgtccg gggaagtatt ggcaaaaaca cgtgccagca 60  
gcagcggtaa aacgtgtgta gcaagcgtag agcagaagaa ctgggtgtaa aggtcgagta 120  
gtagagtaag tgtaaaaggg aaaggaaagg agagaaagag gaaagggatg aaatgcagag 180  
atctctagag aaaggcaaga aagaaaagaa aggaagacac agtaaatgag gcgagaaagc 240  
ataggaagtg aaacggatta ggaacccgtg tagtctatgc agtaaaagaa agaattgagta 300  
agaaaaaagg gagtcattcc accaggggag taaaggcgca agaaagaaac ccaaagcaat 360  
tgacgggaat cggaaaaanag ggtggatcac gtaaattaat c 401

<210> 1984  
<211> 392  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-B11

<400> 1984

accgtttgca cgtagttgat caccgagaag aagacgattc ggaggaccgt atatggaggg 60  
aagaagaagc tgaggaagtt ccaaaatacc aagttccaga agagagctac gcacagagag 120  
aagttagtgg aagaaagttt cgagaagaaa tgcttcaagc caaagcttca cactctacca 180  
acatagaact ccatgttggc gatagatgct ttgttgccgc taataaccgt gttgcaacag 240  
ttcgttacgt cggaaagctt cctgttcatg aagctgaaac agtgtttggt ggagtcacgt 300  
ttgacgaacc tgtaggaaag aatgatggca gttatcaagg acattactat tttcactgcg 360

aaccaggata tggaagtttt gtcctttga aa

392

<210> 1985  
<211> 164  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-039-Q1-E1-B4  
  
<400> 1985

aaatgatgat tgctgggttt tgtggctcaa tagcccaagt tagtccttat tacaagaagg 60  
ccttggtgttg taaaaaagct tgtgtattta gatgctctgc tcataaacat aacattttga 120  
aatatttgga ccatgtttct cccgggaaga aaagaaagcg tttt 164

<210> 1986  
<211> 396  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-039-Q1-E1-B5  
  
<400> 1986

cccacgcgtc cggaattaag tcggatggaa tagctaagaa tcttgaagaa tggaacgaaa 60  
taaaaatcat tcagactcga gttttcacca tgaaagaaca gaaacaactg aagagtcgac 120  
gtcagtcctcg acggaacctt gtatgggaga gttgcagcaa cttctttcag tgacacttga 180  
aagaagccat ttggacataa ggaagcttca acaagcagcg aacgattttc gtttatgcgc 240  
aaagacgttt aaaatatgtg atgtgaagtt ggaacaaagt tttctcaaaa agtcaagtga 300  
ttagacaccc tcatggtttt tcattgaaat aactggttgc tcttccttga gggcaactat 360  
ttattacgaa aatttcgtgc accttctctt acaata 396

<210> 1987  
<211> 358  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-039-Q1-E1-B6  
  
<400> 1987

actttattgt gtttcccttg tgtgcgcttt accgtatagt agaaattcta atgttacaga 60

gctagatccg cgttcttttg aaaaacaagt ttggggctca ccggagaact ggtaagggag 120  
 ttggaatagc ctaactcacg ttcgggctg ccctaaggaa acaagaatag gctcatagag 180  
 ttctatgctc cttgggtcgg ttattgtaaa caacttgagc caatttacga gaaagttgct 240  
 tcgaaattga aagatgctgt aagagttgga gcagtaaag cagacaaata tccagagctc 300  
 gcacaaaggt ggtgacggta ccaaaagggt gcacggaaac tgcttgtgtg gctgaaat 358

<210> 1988  
 <211> 390  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-039-Q1-E1-B8  
 <400> 1988

acatcaacaa ggaaggaaag gacacttatg tcaagttcca ctgggttctt aagctagggg 60  
 aacagaatct actcgatgac gaggcacaga ttgttgagg aaaggatttc tctcatgcaa 120  
 ctcatgactt gatagaatct attgacgctg gtgactacc tgagtatact atgtgtatcc 180  
 aaacaatgga tccagccaca gaaaatgact atgattttga tcccttagat gataccaaga 240  
 tttggccaga agacatgttt ccaaagaggc ctgttgagc tcttgccta aataagaatg 300  
 ttgacaactt tttcttagaa agtgaacaga tcgctttctg tccaggtgtg atggtaccag 360  
 gtatatatgc ctctgatgac aaaatgctgc 390

<210> 1989  
 <211> 210  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-039-Q1-E1-C2  
 <400> 1989

accacgcgtc cgcccacgcg tccgccacg cgtccggagc aaatcgatat gaaaaggcaa 60  
 aatactccaa atagaaagtt ctttaccgct gtagtggtcg cactgtattt acatgctgtt 120  
 cactcgacac caaaagatta tatagctgta catttggtgca actttgttgc ttttactatc 180  
 gtatttatag ccaaaatgcc ttggatgcac 210

<210> 1990  
 <211> 405  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-D5

<400> 1990

cccacgcgtc cgcggaacgcg tgggcgcacgt cgcatttgta gtagtattgt ggtgctcttt 60  
 ccaaccggtt tctccaacga cgcaacacaa aaatgcctcg tggccaaga aaacatatga 120  
 aacgtttggc agcaccacaa cattggatgc tcagcaaact tgggtggtatt tgggcaccta 180  
 gacctagcag tggaccgcac aagttgcgag agtcactacc tctcttattg gttctccgca 240  
 atcgactgaa atatgcgctc aataatagag aagcagtggc tattttgatg cagcggttgg 300  
 taaaagtgga tggaaaagta cgcaccgata aaacttttcc agcagggttc atggatgtga 360  
 ttgaattgga acgaaccaat gaaacttttc gtttaatgta cgatg 405

<210> 1991  
 <211> 362  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-D6

<400> 1991

accacgcgtc cgcatttttg tagcgtacag gttgtggttt tcagtttgta tggtttggtc 60  
 atttgtgccc gtaacgaagc ctattactac caattgtcgt caaaagaaga aaagtacggt 120  
 tcaatggggg aaaagatggg gaacatacgt accgtcaact agcggttcgt tcttacagtg 180  
 taacaggtgg aataatcaca agcaaaactt tcgaccacaa aggcaactct tccattgtgt 240  
 cttggaagac tttagcacgt ggatgtgcaa cttgaagagt tacgtggaag acaatactcg 300  
 gaaaatttgg agacaatcca agattgaagg gcagcagcac aaagaaagtc aaacgccgga 360  
 aa 362

<210> 1992  
 <211> 447  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-D7



<400> 1992

gtcgaccac gaatccaacc acgcgtccgc attttggtag cgtacagggtt gtggttttca 60  
 gtttgtatgg tttgttcatt tgtgcccgtg acgaagccta ttactaccaa ttgtcgtcaa 120  
 aagaagaaaa gtacggttca atgggggaaa agatggggaa catacgtacc gtcaactagc 180  
 gggtcgttct tacagtgtaa cagggtggaat aatcacaagc aaaacttttcg accacaaagg 240  
 caactcttcc attgtgtctt ggaagacttt agcacgtgga tgtgcaactt gaagagttac 300  
 gtggaagaca atactcggaa aatttggaga caatccaaga ttgaagggca gcagcaaaaa 360  
 gaaagtcaaa cgccggaaaa gtcgaccttc tatttacaga agcaactttt gaaaggccag 420  
 ttggagagta ttttacggga cttgtac 447

<210> 1993

<211> 322

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-D8

<400> 1993

aattacaggc aagggaatgc atctcatccg ctgttacatt gattgtgatt tgttgtgctg 60  
 agcgagaggc aagggtgtat catggcaaag gcagtgagaa ttggtgctga aggttacagg 120  
 ttaaagttgg acggtgcagt tcaagagata gacggtcgtt ctgtagttct ggtagatgtg 180  
 gatagtatta cccctctcat gtttggaggt agtatgaaag aaaaggccaa attgttggat 240  
 gccaaagttc taaggaagta ttatgaggag aacaaggact tcttcttctt gtcgactaga 300  
 gaagagaaga aaatgtttgt ga 322

<210> 1994

<211> 345

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-E10

<400> 1994

ggtaclagtc tagaagtccg ggccgaccca cgagtccgaa aatattcaac aagagttgaa 60  
 cgactttgtg gaaaaaacia gagaggaaat ggaacaagta agtaggaata cgagtgttgt 120

aagttttcca tcacagactc gtggatatag atggtagagt gtgttgctca acatatcggt 180  
aagaaagaag aacaacaaag agggagctac catagatagg atgtatztat ggatatgttt 240  
gtgtctagat attgccaata aagcgggtgtg tttggataaa aaaaaaaaaa aaaaaataa 300  
aaaaaaaaag aaaaaaaaaa aaaaaaaaaac aaaaaaatca aaaag 345

<210> 1995  
<211> 361  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-039-Q1-E1-E3  
<400> 1995

aattggtttg ggattgttgt gtattggtgg agttgcaaag aggaaaacat gtcaaagttt 60  
gccttgccctg cattgcctta tgactacagt gccttggaac cacatatcga cactatgact 120  
atgaacgtac atcacaaggg ccatcaccaa acttatgtca acaatttgaa tggtgccata 180  
caaggggaac atgggggtca gttcaagggt ctctccatcg aaaacatcca gaggaatgct 240  
gcaaaggcac ctgatgctat caaggcaact gtgagaaata atggcgggtg tctactacaat 300  
aattccttgt tttggacact aatggcaccc acaggatctg caaatattgc acctcacggt 360  
g 361

<210> 1996  
<211> 428  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-039-Q1-E1-F1  
<400> 1996

accacgcgtc cgcccacgcg tccgcccacg cgtccggtgg gatgaagtac aaacaagcag 60  
ttttgagtga aaatgtgatt cctcaagaag tgagtgccaa caagttgcga gcctgtatgg 120  
tttgtggact ggtaaagacg ttttaaccagt ttgtcgtttt tggctgcgaa aactgtcctg 180  
gactgataga cgtgagagtt gcagatagag aacgagtagc aaccgttacc acgagtttat 240  
tttcagggtt ggtttccatt actcgtcctt tggatagttg ggttgccaag tggcagcgag 300  
ttgctcgtct cgtaccggtg tggtatgcaa tagcagtagc agctgctctc cccgaagata 360

ttgtggaaga gttggaagaa aaaggacttc aagtacctcg aacgagagca acgcagctgc 420  
ctatgaat 428

<210> 1997  
<211> 373  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-039-Q1-E1-F11  
  
<400> 1997

acggacgcgt gggcggacgc gtgggcgagc aattcaaggc aaaactgagg caagactgga 60  
aaacggcaat atttgcttca tggaaagtat ggccattggc acacgctatt aactttcgat 120  
tcgttcttag caatcaacgt ttactttata tcaacgctgt gcaaataatt tacaacgtgt 180  
ttctttctaa tattgggaat aagagggcca cttgagcaag taatgggaat atccaaaaaa 240  
tatatatata tatatatcat gagagagata cgtacttggt gtgtgttggt gggttatagt 300  
tggtgttggtg tttcattaaa gtgaagttta catatcaaac aaagctaag ataactggta 360  
ctcctcgaaa agc 373

<210> 1998  
<211> 431  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-039-Q1-E1-F2  
  
<400> 1998

accacgacgt ccgagagcga gttttgggta ttttgtgtcc tcaagcagtc atgttggggtt 60  
tcctaccgac catatcaact agtttcccc tacgacaaag tgaaagttgc cactgttccc 120  
acgtatctaa atacagggtt gggcagcgtt ttgtcgcacg caactgtcgt cagcctcggc 180  
aaggaacaat cttgataatg tcaagcacia gctcttcgga cacttggtta cagcagatac 240  
aagacagcat caagaaagcg gaagaagcaa cgcaaaagta tggaaaaaac tcgaaagaag 300  
cagctgctgc ctgggatgcc gtggaagaac tggatgcaga agcttctcat cagagagtaa 360  
aagaaaagac cgaccctttg gaaaagttct gtgatgagtc tcaagaagcg gacgagtgca 420  
gagtatacga t 431

<210> 1999  
 <211> 413  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-G10

<400> 1999

ccgggccgac ccacgacgtc cgctggaaag tacagtggaa agaattattcc agaagggttcc 60  
 cgactgtcac tcgagaaata caaaggattg aaggaagtag cttttacgga acgagagtgg 120  
 cagattgaga agaccgatca gttgaagcca cttgctcaag aacttggttg tactgtagct 180  
 cagttagcga ttgcttggtg tgcagcgaat ccccatgtat ctaccgtgat tactggagcc 240  
 acaaagttgc agcaacgaga agagaatttc aaggcaatgg atactgttcc caagttgaca 300  
 ccggaagtaa tgaaacgaat cgacgacatt gcacaaacca aaccagacta caatccagaa 360  
 atgaaaatgg cacgtcgagt gagaggaata gaaaaggctt gaagatgtaa tgt 413

<210> 2000  
 <211> 417  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-G2

<400> 2000

gcgtccaact ataacttggt gctacccaac gatcttaata acaatactag caacgcacga 60  
 ggatgacaag aaaatgtcgg tttttgatcc cccatgggga ataacatgag taaccactat 120  
 aataatattg ctagatgtag tattgatcac caactacata actaaatgtg ataaatgaac 180  
 atgtaactat gaataacgct ccagattttg taaattttct tacttttgac aactttcctg 240  
 attacatgaa gtcgtatata gatgtatggc gaaacgtacg aagcatgcgc agtcatcaa 300  
 gtcgaagtcc tgtcaaactg ataaaatttg aatgaacttg atagttgaat gtcgacgtat 360  
 ggatggccct atccgtcaca actgtcctta tttttgtaca agaacgactc acctatt 417

<210> 2001  
 <211> 157  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-G4

<400> 2001

ctggttgctc cgactgctct gagttgcctc tttccctctt tccttatcgg tgccgcaatt 60  
gcacccgacg tactttcaga ggatagatcg ggatatgctc agcaaggcct gttgcaacat 120  
cagtgcacaac tactatgtta gcagtatgca ttctatc 157

<210> 2002

<211> 420

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-H2

<400> 2002

gcgtccgacc acacgtccgg ctgttcagcg ccaaactgac gacgtcttcc gaaacctcag 60  
tttacagctt gtgcaaagag gacaatagct tggctcttcg tagcttttta aagcactctt 120  
gggtgtgcgt cagtgtctatt cactattgct ttgggtgacc agagagaggt acattcaaac 180  
actccatttg ttacttttat agagaattac acgcggagca attctgcaca agcggagaaa 240  
gggaagagggc aggcattcaa gccaacagct actgactcgt cccaggctta gcaaaggaaa 300  
aaatcccgac gagtactata catgtttcga tgcagagttt ggttctggct gtattttgga 360  
tagagaatta gaatttgtac tcaactggcat taatacttta cgatgtcacg tgacatatgc 420

<210> 2003

<211> 330

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-039-Q1-E1-H4

<400> 2003

aggaatgaac taaagtcaac gaaaagctcc ttgagacttt gtactgggtgt gtttgttccc 60  
aanaatagta attttctgtt agatacgagg cacgctcttc tagttgggcc cggttcctgt 120  
gtccacctaa gagcgtttcc tagaaaacta gcagaaatta cttccttgag aagtgacgct 180  
gctgtgagcg cttctgttac atatggagaa gaaaattctc cacaactgtc cgtttcggac 240

cttgcgttg gagagacgta tactggaaca gtgaagaata tcaccaacta tgggtgccttt 300  
gtggatataa gagcaaaca aatgggattg 330

<210> 2004  
<211> 447  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> unsure at all n locations  
<223> Clone ID: LIB190-039-Q1-E1-H6  
  
<400> 2004

gaccacgac gtccacgaga gagagagggg atgagtaccc cagccagacg aagattgata 60  
agagacttta agaaactaca acaagaccct cctagtgggt gtagtggtgc tccttgtgag 120  
aatgatatta tgcgttggaa tgcagtcatc ctaggcccag aagatagtat ctgggaaggt 180  
ggcacgttta aactaacttt tcagttcacc gaagactacc ctaacaaacc gcctacggtc 240  
aagtttgtgt ccaaaatgta ccatcccaat atttactcgg atggaagtat ttgtctggat 300  
attttataaa atcagtggag tcctatctat gatatttcag cgatattgac ctccattcag 360  
tcgcttttgt gcgacccgaa ccccaactca ccggctaatt cggaagctgc taggccttat 420  
cagganaata gaagagaata cgaccgt 447

<210> 2005  
<211> 393  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-039-Q1-E1-H8  
  
<400> 2005

ccacccacgc gtccgggctg actatccttc tcctgcacta tgtctgcgaa tattctgaat 60  
aaagtagcca agtatgccat tgttttggga gttgctgggt ctgccttgca atcttcggta 120  
ttcgttgtag ccggtggta ccgggcagtc gtgtttaatc gtttcacagg agttgaagaa 180  
cacgtacgtg ggggaaggaat gcacttgaaa atcccgtggg tacagagacc tgtcttattt 240  
gatataagaa cgaggcctag atcgatcaat tcggtgacag gaaccaagga cttgcaaagt 300  
gtgaacctcg tgctacgtgt gctatccaag cctaacagag atttgttacc acgaatatat 360  
tctagattag gacaggactg ggacgagaga gtg 393

<210> 2006  
 <211> 381  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-A11

<400> 2006

```

agcgattcca tgttgaaaga gggtagacgt atattgtccg atctcaagtt tcagggtgctt   60
caagatggaa aacctcaggt gataacttcg gatcaagtat tcggaggaaa gaaagtagta   120
ttgtttgggt tacctggtgc ctttactcca acctgctcta ggcagcacct tccaggcttt   180
ggacagaagg ttgatgaaat caaatcgaaa ggagtagata cagtcgcttg tttagctgtc   240
aatgaccctt ttgtattaca tcagtgggca gagtcacagg gaggggcagg aaaaattctc   300
atgttagcag atgggtggtgc gcaatctgtc aagaaacttg gactggatat cgatactggt   360
gactttggtg gtattcggtg t                                     381
  
```

<210> 2007  
 <211> 416  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-A4

<400> 2007

```

aactcgtgaa acttacagtt ggtgtaggat tgcctaaagc aaagcgtgga gattggctta   60
tggagaaact ctcagaaata ggcgttgata cagtaatacc tattcattat gaacgaacaa   120
attctgaacc ttacgaacgt gatagaaaac aacgggtggca gaaaatttgt atctccgctt   180
gcaagcagtg ttgccgcaat cgcctgatga agatagagga agagcaatcc tttcaaaata   240
ttttatccaa gcaacaagtc tacaaacact gggatcaagt gtatgtagct tctatggagg   300
caactcgtcc aatgatactt cctccagtaa aaagtgccag tatacttgct ttaataggtc   360
cagaagggtg attgacacct caagaagaaa aaatagcttc tgatgttggt gcacac     416
  
```

<210> 2008  
 <211> 377  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-A6

<400> 2008

cccacgcgtc cgaatggaga caaaaaggta taccaattta ttcattggcg caatggaatg 60  
tttgtgatta cgcacgaaaa tcaggctgtt ctgtagtgc taagacacgg tgccacatac 120  
gactattcac atccacctac aacattccaa cgcagtcaat acacaggtaa agagtatgta 180  
tatcaatttc atattacctt gattcttcct cgagaggaca actcatgcat tggaataatg 240  
gaatattggg tattgataac tccaattgta aaaccactac aatccatata gtcagcaatt 300  
acaaaaaaca attcctgtga caaacaata gaaagtgaat ctcaccctcg accagccatg 360  
gcactatgta cggctga 377

<210> 2009

<211> 416

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-B1

<400> 2009

ccacgcgtca gggtaagagg actcccaaact gttcgaagt gttatagtaa aaacaattgc 60  
cgacatcagc gctggaatct gtgtcgcagg catccacaca tgggaactgg gtgtagtcga 120  
cgcataataa atcaacatgt agggaggatt gggcagtgt cacggaagta tgggacaata 180  
ttcaggaatc tcgtaagcaa ggcaggaaat aaaaggaagg aatacacggt agatgaggca 240  
aaaacacata cgaactgcaa cggtttaaga tctcttgtaa tcgatgcact aaaagactga 300  
atgattaagt caaataggag tcattcctgc tagaggaata aaggcacgag agaaaaacgc 360  
aaagcatttg atggagatct ctctacaggg gtggatcacg tgaattaatc ggatat 416

<210> 2010

<211> 402

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-B10

<400> 2010

acgcgtctag caagcgtctg atacatatgg ccacgcgtgg tcaagatggc cttgtgcaag 60



tcaagaaggg atatgagtag tagagagatt gcaaggagat aatattttgg atagagcact 120  
 gtcacaatca ggagatgtat ttcagtgtct ttgcagcatc cagttgttgg tgaatgcata 180  
 cggagctatt agaggaaata ttacttgtcc agaatgtatc gaattgtgtc gtctagtatc 240  
 tggacatata gcggttttgg tcgatgaaga tttggatgac ctacgtttgg aaactatctt 300  
 gggagcacta ttgtgtactt gttattgtga gtggaagcgt tttgaatgag acttgggggt 360  
 acaagaatgg aatgaattgg ggaagatatc ttccgtatat ac 402

<210> 2011  
 <211> 398  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-040-Q1-E1-B12  
 <400> 2011

ataccagtat cgatccagag gtaacgaagt aaataaacgt ttgaaaggct tcaattatga 60  
 aaggaaaaac aagtgtacca cgggtcaattc atcaacctca agctgtacaa cactaactgt 120  
 gaaaatgcag taaactagca gtaggacgga aagaacccat aattcatgac tagataagtt 180  
 tacggaggag agagaatcat gaagtagagg aggtggggta agagatgaga gaccactgca 240  
 tgaggataag gaatctaact gagtaaggaa aataagctta agctagtttg gctggggaag 300  
 taaagcctaa gaaagagtaa attacgcaag caaaggcatg agagaagtat aatagcagaa 360  
 gcatgcttga agaaaaagaa agagatttca cgaaagga 398

<210> 2012  
 <211> 402  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-040-Q1-E1-B3  
 <400> 2012

gccggccac gcgtccacc aagcgtccga tctatttgga ttggtattgc acacacttat 60  
 catgaaaact cctcggcatc tttgttaacg agaggcattt tggatgccat ctccggtgga 120  
 attttaatat acacaggatt ggtggagttg ttgacttatt ggtttacgcg caactcgaac 180  
 tttttaagac gcaaagccat atctattttt agtattgtgg gatttgtctg gttaggagcc 240



<223> Clone ID: LIB190-040-Q1-E1-B9

<400> 2015

ggccgacgca cgcgtccacc cacacgtccg agacagatgg ccaacgctgg tcaagatggc 60  
cttgtgcaag tcaacaaaca tagaaaagta aagagattgc aagaagataa tattttgaat 120  
agagcactat cacaaccagg agatgtatct ctgtgctttt gcaacatcca gttgttggtg 180  
aatgcagaaa gagctattat aggaaatatt acttgtccag aaagtatcga attgtgtcgt 240  
ctattagctg gacatatagc ggtttggttc gatgaacatt tggatgactt tcgtttggaa 300  
gctatcttgg gagcactatt gtgtacttgt tattgtgagt ggaagcgttt tgaaggagaa 360  
ttgggggtac aagaatggaa tgaattggag aagatatctt ccttagata 409

<210> 2016

<211> 386

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-C10

<400> 2016

acccaagcgt ccgcccacgc gtcagcccat gcgtccgaag aacaggcacc tttgaatata 60  
cagttgacgg gataagaata tgaagaagac tatgtggaag gcattctatc tagatgagag 120  
atagttttaga tttgtgtact agggtcgtgc tatatttaag tgtttataga gatgtgtgtg 180  
tgtgtatgca agtatgatag cactogaagt ctctttgtc catataaatg agtttcaacg 240  
cccagatgtt tgatactcat agtctatact gtctattatt gtagatctag ctgttacgga 300  
ataatctacg gacgtgcatg cataaaacgt gccaggctaa ttgatgctat tttgaacagg 360  
gacacctgct ccactagatc cataact 386

<210> 2017

<211> 99

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-C11

<400> 2017

cacgcgtccg attgcataga tagatggccg gttatttacg acatcgtgta cacgcgcagc 60

ttcgtaaagg tctcaacggg cgaattgcgt cgtgtgtgg

99

<210> 2018  
<211> 402  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> unsure at all n locations  
<223> Clone ID: LIB190-040-Q1-E1-C12  
  
<400> 2018

gcgtccatgc caaattactg antcntatca attgtattcg gggtgcaatg gtggaaacgc 60  
ttcttatgga cttgccattt gtgctgaaag aacagcggta gtaaaggctg taagtgaagg 120  
tcatactcgt ttctgagcga tagcaatata tacggatgcc gttgggcaag tatggccttg 180  
tggtgggtgt agacagtctt tatcagagtt tggaaacttt ccagtgattg ttatgcaagg 240  
aaataaccag ctacaagcag aaatgttaca tgacttgta cccaaaagct tttccaagtc 300  
cgatttaaaa acaatttaag tcgtcctctt ttggcgcaac gcattttttt gtgtgttttt 360  
ggaattttcc atcgcgttgt gttggtggga ataataaaaa ct 402

<210> 2019  
<211> 420  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-040-Q1-E1-C2  
  
<400> 2019

accacgcgt caacacagga tcgacattcc gtacgttgtt tgctgctctc gtatttcac 60  
aattctttga aggatttgct gtcggtacta ctgtttccga agcccagttt ggcacttgga 120  
ccactatagt aatggtactt tgctattctt tggaaactcc aatcgggata tctattggta 180  
ttggtattgc acacacttat caggaaaact cctcggcatc tttgttatcg agatgcattt 240  
tggatgccat ctccggtgga attttaatat acacatgatt ggtggaattg ttgacttatt 300  
gagtttacgc gcaactcgaa ctttttaaga cgcagagcca tacctatatt tagtattgtg 360  
ggatttgtct ggttaagagc catctgcatg gcgattatcg gagcgtgggc ctaagaataa 420

<210> 2020

<211> 248  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-C3

<400> 2020

cccacgcgtc cgagaatttg ttgattatga caacaaacga agaatagactt ttcgttcgtg 60  
tttgactgct tttttcgtcg gactgagaca tgagttggac tgagtcaacg acttttatct 120  
cgacatagat gaggagctta ccatatcgga tcttattctg aaagttgcaa ttgacgacta 180  
catcttagca ctgagagtga gtacgggcga taggagtcac agtggggaga actcagtgat 240  
ttgcaggg 248

<210> 2021  
<211> 420  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-C4

<400> 2021

acggacgcgt ggggcgtcgg ttgtgagaag tgtcgattat ggggaaaact tcagtttctt 60  
ggtgtcggaa ctgcgttgaa aatactatct gatgatcatt tgacatttct tcaacacaat 120  
gaagtgaact ccttggtgaa tgtgttgat aagctttcta ctagtgtggt aactattgca 180  
tacatggaac gtctccttgt gttgcaacgt attcgatact ggttggtggt tgccagttgt 240  
atgatgggtg tggctttggt atttatgttg atgtttcgac gttctttttg ggagcgtgat 300  
gagttgtatt acaaggccaa atctgtttaa agtcaatggt gctatttgta tttgaaaatc 360  
tttttttcat tttggaatat gctggtacta ggttggtggt gttgtatcga gtgacatgta 420

<210> 2022  
<211> 426  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-C5

<400> 2022

gacccacgag tcagcccacg cgtccgattt aaattagggc aagagatgac cagcagcagc 60

ttctatgact agtcgcgtgt atacttttga tacatccaat agctgggtcac cttattgtgc 120  
 ctttgaatgg tatagtttca taaccaaaaa agcttattta tgcaagtctt tcatttttga 180  
 agtgtttggc gtgggtcatat cgggtggagcg caagtcggac tcgatagagt gtctgttaga 240  
 cgattctttg cagttgacca ctttttggtg tcctaaaaaa gatacatagc gattagaaac 300  
 tatgttgcggt ttgggtgaca atattcaagt gatagggtcac ccgatggggt ctcaagtgcc 360  
 taccttgaac gcggttcaag taacggtgca taaagctccc aactcggaat gcacgtattg 420  
 gcttga 426

<210> 2023  
 <211> 394  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-040-Q1-E1-C9  
 <400> 2023

gcgtccaccc acacgtccga ccggaacca gtaattgctg accgagacac gaaaaaactg 60  
 agtatcaggt aagaatacat ggagtatatc acgaaccaca catgaatgaa gtcacactaa 120  
 gagaacgagt agagtgcatt tttgcaagat tttacttcaa gagaacagtg taatacgcgt 180  
 cccttatgca tactgtccca ncaatctcac agaggcagcc gatactgtta caccagctat 240  
 cccgatacca cccgctgctc attgatcata agctgtccct ccgacgtcaa gctgaaccac 300  
 tatctctgga taaccgattt ggaaggataa ccataacggg tgaaaggcca atcagtgcta 360  
 ttgagaccag gtacacctcc agagctacaa ccat 394

<210> 2024  
 <211> 266  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-040-Q1-E1-D12  
 <400> 2024

tggaccgtga aagagctcgt gtttttcggt cgactgggtac tggctcgctt cgaaaccatg 60  
 accctttcct catgttggat gagttccgtg tccatgcac agcatgtttt cctgaccatc 120  
 cacatcgagg gtttgagact gtcacttata tgtttgacgg ttattttaag catcaggata 180

atcatcgata ctctgggagtt atagggccag gtgatgttca attgatgact gcacgtacag 240  
gaatacttca cagcgaaatg cctcaa 266

<210> 2025  
<211> 347  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-D4

<400> 2025

acccacgcgt ccgcccacgc gtccgcccac gcgtccgcgt tggttgaaat gtttgcgaga 60  
atcgatgcgg tggatatgac aactttgaaa cgagttgcca atcgttatat ctatgacaga 120  
gacctgcag taccggtaat gggctctatc tttacccttc ccgactacaa ttggattcgc 180  
cgaagaacat tttggaaccg ttattaaaag atgatgtgtt ggagaatggc acaagagttt 240  
acaagtcata atataaatct agttgggtggc acaagttgtg aacaacgtgt atatttcgta 300  
tttataatat acacagacat gaagaagttg aaaaacagaa caaagaa 347

<210> 2026  
<211> 384  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-E11

<400> 2026

acgcgtccga gtggacgatc cgcagacgcg tgagcgaagt gagagttagg catacatctt 60  
ttcgtttttg catcattggt tgtaactgct aaagacgcag tgctcaagag acttagagtg 120  
aagccgaacc aaacgagcta ggttttgctg tgacagagcg ataaggaagt tgatgtggac 180  
agacgtcttt tgttcttttc actgccaac aagtgcacaa gagatccgct cctgccatat 240  
gacaaaacaa ctagtcactg agtacaccgt gcgtctgcgc agggcattct agcagcacta 300  
tactattcat gagccagtag aatactacgc cataacagcc tcgttctcag aatagtagaa 360  
tttttctgca aacaagcttt gggg 384

<210> 2027  
<211> 405

<212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-040-Q1-E1-E12  
 <400> 2027

atcctacgtc caattcacat catggacaac ttataagctc tgatggattt gaaacgggag 60  
 ttgcagggtc cggtgatatt atttttgcat attctggaat tttcgtattt atcgaattta 120  
 tggatgaaat gaggaaccca aaagacttta acaaacttat ttatacagcc aatgctattc 180  
 ttttcttttg ttactcattc gttggtatct taggttatgc tgtgtatggc aagtctgtgg 240  
 tgaatccaat tacttctgct ttaagtgaag gagtgatgaa aagactggcc aacgcatttc 300  
 tttggttaca cataacttgcc gcgtttgtta tacacggttt gattcttaat cgtgctatag 360  
 ctgtccggtt ttgtaaagca tatgtggatg attttggttg cgttg 405

<210> 2028  
 <211> 426  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-040-Q1-E1-E3  
 <400> 2028

actcatttgg cacacgaaac tgaaaggagt gagcataatg ggcaatacta tgctttcttt 60  
 cactcgagcg attcctacta tcctatcatt gtcgcagcca ttcagctttg gagttcggac 120  
 ccttggagtc ttttgtcgca acggacattt gatggacttg attcattaat gtttgtttct 180  
 gttgccgcta aagcctactt gagggattca aagttatgag ggactgacct tttctgtttg 240  
 aactagcagg attgaaaact agtttttctg ccagatccaa ctcatatata ggaataactc 300  
 caaacttggg aacacactgc tctattctca aaagatgctt taagagtta tcatagatca 360  
 tatgtatttt gtcccagtga ggatgatggc tactctaaga acaactttca atgagtcaat 420  
 atatct 426

<210> 2029  
 <211> 371  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-040-Q1-E1-E4



<400> 2029

atcgacgtgt tgtttaaaaa acctaacgtt cgccttcggt ggaagcaagt tcaattgggt 60  
ggagatggga acgtccaaga ataataaacc aagcaacaag ccaaagtccc cctgggtccc 120  
ctccggggccc tgtggcaaac aaccctgat actccttaaa aaagtcccct tccaatgcag 180  
cactgggtcg ttctcatcgc tccgacaatg ggaaatccaa gctgaagaac gcaatcgaaa 240  
agctaagcag attctgcaac ttccttcgtc ttatcgtgtt gctatcggtc cagggttctga 300  
taccggtgcc gtagaaatgg cgctttggag cttgttaagg ccacgtcctg tagatgtttg 360  
ttaatgggag t 371

<210> 2030

<211> 386

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-E9

<400> 2030

gcgtccagtt cagacagtgt agagtcgcac aggtcgattg ccgatgaaca aaagttgacg 60  
tttcccttat tatctgatga acgcggtaaa gtacgcaagc tatacgggtg accaaagagc 120  
atgtttatta tgctgatcg ctgcacttat gtcattggtc cggatgggtat tgtgcgacac 180  
atctacaaca gtcaagtagg tttcgcatat cacgtggacg aggcaaagaa ggcgttggca 240  
aatatacgaa acgacgctca agcagcagaa gagtgtgcac acaacactgc tttgtggctt 300  
cattgatacg cagaggggtc cagtcagtgt cttcggatgg tgtcggaagt tactttgtta 360  
cttgtgttga cgaaacatgt gttttt 386

<210> 2031

<211> 325

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-F1

<400> 2031

ccacgcgtcc aggcaagcgt ccgatgcagt ctattgtgtg aggccttcca tgtattccac 60  
atgcaagcga gtaaagtga cgcgagtata agaagatgtg taataaatgg cggtcctaaa 120

agtaaagatc catgtgtttc gtagttagta tacgtttgaa acgcgtccta tatgcaagga 180  
gcaatcactg tggcactgat ctttcgtccg actcagcgat caagcaatag atgtcagaat 240  
gcctaaactt gcactaggac agggacatac catacatctt gtcaagatga gtttaaggac 300  
gagagaaatt catggagtga atgaa 325

<210> 2032  
<211> 401  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-040-Q1-E1-F12  
  
<400> 2032

accaatattc tacctaattc cgtggcgcat atacttcac ttttccaag gcaattcaaa 60  
cgtattcacc ttccaattca actcccaggt actcatcttc ctatgcaacc aatacttata 120  
cttcctatga agctcctcca atgacttatt attatccaga atgggtacttg gaatgttatc 180  
aatgggtgttt cgaatgtctt ttgtgcaact tggagtacgg tttctattac attcaggaac 240  
caactcctac tccctattat cccagctatt ccagttctta tccgatgtac agcagtagct 300  
attccagcta cagcagttac ccatcttata caaccagttc ttatagctca taagaaagga 360  
tgctgaatgg ttggtcaggc gaaggatgcc tttttgtatg g 401

<210> 2033  
<211> 449  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-040-Q1-E1-F3  
  
<400> 2033

ccgggcccga ccacgcgtcc acccacgcgt ccggcgtaat cctgggtggtta ttgttcgatc 60  
gaaaacagtt acggctagta gtactacaaa tgtagaacaa gatccatgac cgacagtttt 120  
gaacgagaag aatgatgtgg caaattgcac gcccgattca aacgcaaaca tcgagtcgca 180  
tgattcatac caacttaccg atgagaaaca ggagcaagaa gatgaagatt ccgacgaaga 240  
atacgacaga agaaagagaa agagaattcc ttcattgggcc cgaagtcata atttaaagga 300  
gttggtgcag cagcaagtaa gtgtgaatcc tgaggaaata tttccccgtg cagatacttg 360

tgatttggaa gaaatatttg gtcccaatga gaggaataag agatatcggt aagtggacaa 420  
aagttcggat ggatatcgaa taatatcgg 449

<210> 2034  
<211> 309  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-G1

<400> 2034

agcacaagtg tcagattcag gcagtgaact gacgcattat atcatagaat tacacatgca 60  
agtaggtaaa gcgaacgggt gattaaatac gtgattctta atgcgataac acgaaagcat 120  
agaagaattt aacaactgggt tacagtaaaa accatagacg aagtatacgt gggaatctca 180  
catgaggaaa accacattcg gactgacaat tggtcctaat aagataagtc agcactgggg 240  
aatattgggc actgtactcg aaagtatgac acagtaatga cgattctatt aaatagaaaa 300  
cgcatataa 309

<210> 2035  
<211> 394  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-G10

<400> 2035

acgcgtccac tttagttcat cgttgctcat tcttgttgca gatatgacag gtcgtggtaa 60  
aggtggtaaa ggtttatgaa aaggaggtgc aaagcgtcat cgcaaagtct tgcgagacaa 120  
tatccaagga ataaccaaac cagctatccg tcgtttggcg agaagaggtg gagtgaaaag 180  
aatctcagga cttatctatg aagaaacacg aaatgtcctt cgtgttttct tggaaagtgt 240  
tattcgtgat gcagttactt atacggagca tgctcgtcgc aagacggtaa ctgctatgga 300  
tgtcgtatat gctctgaaac gtcaaggccg taccctttac ggatttggag gataaagcct 360  
gcttgaacaa aggggtgttc tcaacacctt tcat 394

<210> 2036  
<211> 352

<212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-040-Q1-E1-G12  
 <400> 2036  
 ggaaggactt accaaaataa ggggcattaa taagaaggaa aattggtgaa acttaacccc 60  
 cttctaaaca aaacttacca gaagctttga aaaaaagaga ctatatggac tgtatatgga 120  
 tatgtgaaga gttggagttg cagtcacac tacaaggaca accttttgag tttataccc 180  
 tctttttctt tttactgtta ttgcgaaacc aatgccacct cgctcatttc ttgtggaaac 240  
 gttgtcccta ttcacaaaga gaaccaaggc ttatgacgct tcgagaaata gctctagctt 300  
 tgtgtagaga agactacgaa accgcatttt ccttgtgtcg aaataccgat tg 352

<210> 2037  
 <211> 430  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-040-Q1-E1-G4  
 <400> 2037  
 aggaaatggt caacttgcct tcgttactaa attcgttctt tgctgagggt tttgaattct 60  
 cgctgtgtga cgatgcaagg gagaagatat tgaactttga ggtgacagac tctcatggca 120  
 tatcttttcg agaccgaata tctattttgt atgtgactcc attgacaaga gaggacgcga 180  
 aagctaatag cgctccagat tttgtagatt ttcttacttt tgacaacttt cctgggttaca 240  
 tgaagtctta tatagatgta tggcgaaacg tacgaagcag gcgcagctca tcaagtcgaa 300  
 gtctgtcaa acggataaaa tttgaaggaa gttgagagtt gaatgtcgac gtatggatgg 360  
 ccctaccgt cacaacggtc cttatttttg taaaagaacg actcacctat tatatatagt 420  
 ggaataaaca 430

<210> 2038  
 <211> 297  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-040-Q1-E1-G5  
 <400> 2038

acccacggt cagcccacgc gtccgcccac gcgtccgccc acgcgtccgc ccacgcgtct 60  
 gcccacggt ccggaagag gcaaatacgg gaaagcagta aaagaagaca gagacacgaa 120  
 aaaacttagt atcaggaata aaagaggag tagatgagga atgaaagatg aaggaattaa 180  
 gagttagaga tggagtcac tgaacgaagg caggcttgta gcttaataag acactttatc 240  
 ctcgactgt tattgctaata gtcacgcaa ctcgctcatg tcttgaggag acgttgt 297

<210> 2039  
 <211> 406  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-040-Q1-E1-G9  
 <400> 2039

gggccgagcc acgcgtccaa tttcattcat cgttgctcat tcttggtgca gatatgacag 60  
 gtcgtggtaa aggtggtaaa gggttaagaa aaggagggtgc aaagcgctcat cgcaaagtct 120  
 tgcgagacaa tatccaagga ataaccaaac cagctatccg tcgtttggcg agaagagggtg 180  
 gagtgaaaag aatctcagga cttatctatg aagaaacacg aaatgtcctt cgtgttttct 240  
 tggaaagtgt tattcgtgat gcagttactt atacggagca tgctcgctgc aagacggtaa 300  
 ctgctatgga tgcgtatat gctctgaaac gtcaaggccg taccctttac ggatttggag 360  
 gataaagcct gcttgaacaa aggggtgtttc tcaacacctt tcatcg 406

<210> 2040  
 <211> 127  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-040-Q1-E1-H11  
 <400> 2040

gcgcacgtcg agttgcgtgt ttcagttttt cgggtgccgtg cagcgcttcg ggtcatttct 60  
 tcgcacgggt taacagttca gcaactctgg ttgcagaaga cagcggtgggt ggtataagcg 120  
 atccccac 127

<210> 2041  
 <211> 376

<212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-040-Q1-E1-H12  
 <400> 2041  
 atattatcgt gaaccaaatt catttatata tcattggaga atgagtccca aaaaggaaac 60  
 accgcatact cccataggag gctatgcaaa agctgtactt gatagcattg ttgctctgaa 120  
 ggagaggaat gggtcctctc cacaggccat cataaaatat gtcaaggctc acaatccgca 180  
 gcttccggaa gacaaactta aacttcaagt aaagtttagct ttgcgtcggt tgttaaagca 240  
 gaagcttatt gagaagggtga aagcttcgta taagattgct agcaagagta gtagagttaa 300  
 gaaagcccca aaagaacaaa aagcgaagcg agttgcgaaa acggttcaaa agaaacgagc 360  
 gaacgatttg caagag 376

<210> 2042  
 <211> 212  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-040-Q1-E1-H4  
 <400> 2042  
 atggtagaca ctaagcttaa ggacggtgct attgctgccc tttggacttg ccgccaattt 60  
 ctctatacag ttgtgttagc attttcagca acagtaattg gacttgatgg acggcacgca 120  
 gataacatat ggaacgatgc cccatattat catggaaaag tggatgaactt ttgtgcatat 180  
 tcggcttcgt ctgtttttga acgtggcaac ca 212

<210> 2043  
 <211> 188  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-040-Q1-E1-H8  
 <400> 2043  
 ccacgcgtcc gccacgcgt ccgcccacgc gtccgaaaaa aaaaaaaaaa aaaaaaaaaa 60  
 aaaaagaaaa aaaaaaaaga aaaaaaaaaa aataaattta aatttaaggg gaagatgaat 120  
 ataatagagt gatttataaa gggtttaaag ggtgggtttt ttttgagggt ctgtgtttga 180

gttttttt

188

<210> 2044  
<211> 201  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-040-Q1-E1-H9  
  
<400> 2044

tccgggttgt tgtttcgttg ctgacgatat gcaccgtttt gttttcgtaa gtggttcacc 60  
gacgcttcat atattcgtag attggaatga attataatca gcgaaggtct ccttgatact 120  
ttgttctggt gtgtgtgttc tctatagtac taattttctg ttttactatg aaggacgctc 180  
ttttagttcg gcctaattcc t 201

<210> 2045  
<211> 362  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-041-Q1-E1-A1  
  
<400> 2045

agattttgttt acgagagaaa gctgtacaca gaggagagtg tattgcggcg tcatagtaga 60  
aatcctactg gcgtatttga agtgatagag acgaacgacg ggaagatatg tgccgtattg 120  
aaaaccgaca catgtacact acgagagagg agaccatata tgtggtgaga taatggacga 180  
tgaagtacta agcaagatga tatggtatct gcagtagaac atatgaaagc agcagcaccg 240  
gctgttttagc aaaaacacag cactctgcag aaaagagatg atgtatagta tatagtgtgc 300  
cggctgccat atagtagaga agatatcgat gaatgtgaac gcgagtaaaa tatggtgtat 360  
ag 362

<210> 2046  
<211> 407  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-041-Q1-E1-A11  
  
<400> 2046

gtccacggat ccatccaagg atccatgggc ggacgcgtgg gcggacgcgt gggcttcctt 60  
 ggtagcgttag tgaagaagac cttcgtgaaa ctttttccaa atatggagaa gttgttgatg 120  
 caagggttgt tgttgaacgt gaaactggtc gttcccgtgg ttttggttcc gtatcctatg 180  
 cagaagggttc ctccgtagac gaatgcattg ccgcactgga tggcaaggat atgcaaggac 240  
 gcactattcg tgtgaacaag gcaatgtctc gtgaacaacg cgagagtggg ggagactttc 300  
 gtcgcggtgg tcgtggacga tacggaggtt ttcgttccgg tccttatgag agacgtgaac 360  
 gtgactctga tcgtagaaga gatcatgaca ggagagataa cggccat 407

<210> 2047  
 <211> 402  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-041-Q1-E1-A12  
 <400> 2047

aaggaanaca cagtaaata ggcgagaaa cataggaagt gaaacggatt aggaacccgt 60  
 gtagtctatg cagtaaaaga aagaatgagt aagaaaaaag ggagtcattc caccagggga 120  
 gtaaaggcgc aagaaagaaa cccaaagcaa ttgacgggaa tcggaaaaag ggggtgatca 180  
 cgtaaattaa tccgataaac cgagaacctt acctctccaa gaagggtgtg cacggctgtc 240  
 gaaagaacgt gctgtgaagt gagagaacgt acgagaaagc caagtgagga aaagaaggca 300  
 agtagagggc ggcccagagaa aggaaggggc gtaagacgtg atacagagta ggaagaaaag 360  
 agaagagagc tagaaaggag gtaaaagaag agtaaaagga ct 402

<210> 2048  
 <211> 386  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-041-Q1-E1-A2  
 <400> 2048

gtccaagtgg gacaacgaga ggcagagata cccctcgaag aatgtctcgc tcacgagact 60  
 gtgacatctt cacatcatat aaaagatgat agcccggaaa caaagccaaa ccgcttttga 120



attactggcc acacatagga cgaaatggct acagagctaa gcattgcttg atgacgacaa 180  
 caaccggctg cacacgaaaa gattacttac ttccacggtc tttggtaacc ctagacattt 240  
 tatatgggtc cttgcatcat ttgctaccat gggatgaatt ctgtatggta attaccagtc 300  
 tttgataagt ggtgctggta tttatatgcc agttgaccta cacattgac agactagaga 360  
 taacatgggtt actggcttta tgccac 386

<210> 2049  
 <211> 433  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-041-Q1-E1-A5  
 <400> 2049

gggccgaccc aaacgtccaa cccctcctg gtgctgctgc agctatagaa gaagcgatca 60  
 aagccgaagt tggaattatt gtctgtatta ccgaaggaat tcgccaaaag gatatgggtc 120  
 gagtgaagac tcttttgaat gaaagcacga aatctcgctt aattggcccc aactgcccag 180  
 gcattttgaa gcctagttag tgtaacattg gtattatacc aggttatatt cattcaacgg 240  
 gttgtattgg agttgtttca cgttcgggca tgcttacata tgaagctgtg gatcagacta 300  
 cgagacatca acttggtcag agcattgtta tcggaatagg tggatgatccg tttcatggaa 360  
 catcctttat ggactgtttt gatatgtatt tgaacgattc gcatacgaag ggcacgtta 420  
 tgattggcga gat 433

<210> 2050  
 <211> 404  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-041-Q1-E1-A7  
 <400> 2050

gtccaccac gcgtccgaag atgcaaagt ctttgaaaga aatagccgac tatatgggtga 60  
 cacctggaaa aggtatttta gcatctgatg aacctcccga gttgttagaa cccaagtttc 120  
 gagctttggg agtggagaac aatgcagaaa cgagaaggac gtggcgtaga atattatatg 180  
 gaaccaaagg attggagcaa tatgttcag ctgctattct gcatagtga acttttgaac 240

aacaagattc atccagtggg aaacgttttg tagatgtggt atcagacaaa ggtatattac 300  
 ctggtatcac ggtggatcaa ggtttcgata tattacctgg tacctcncaa ganacattca 360  
 cgctaggatt ggatactttg agcaatcgat gtgaganata tcag 404

<210> 2051  
 <211> 264  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-041-Q1-E1-A9  
 <400> 2051

aacagttgta cattcaacat catcaaatgc caaagggagg aaagaaagat tcttcaaaga 60  
 aagaagccac aagtaaacct gcagcagcag atgctacaaa gacgacagaa aagtctggtc 120  
 cggaagccaa gttgaaggga actggtgcaa agaaacaata aaaagttgac tatgcatgtg 180  
 cagtctgttt atgttttgtg agttctgttt gatagtttcc agctattctt ttggtagtga 240  
 ataaagagaa aattttttat attt 264

<210> 2052  
 <211> 420  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-041-Q1-E1-B10  
 <400> 2052

acccttcgaa tgataatctt atggaaccaa aactagatat tgcaacggaa caagagactc 60  
 ctttaaccag cacggatgta ctattgcttg tatcgctgaa ccaacaggaa aacaagactc 120  
 tccaaaactg ggcgcatatc gagtcttgta aacaaaaacg atattttgaa cctgaaaccg 180  
 tagaagatat cgaagtgatt gtagaacaat gtcgctcgaa taattggaaa ctaagagtat 240  
 ttggagcagg tcattctcca aataatatag ctatgaccaa cgattgcata gttagttaa 300  
 aaagaatgaa tagaattgaa aacattgatg aagaacaaaa gacggtgact gcgcaagggtg 360  
 gcacgcttat caagcaactc aatcaagagc tggccaaaca caacttgggc ttatccaatt 420

<210> 2053  
 <211> 280

<212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-041-Q1-E1-B11  
 <400> 2053  
 gtggaagaag atggtcaaag agatgcaaca accggttgct tctcaagctt tacgtgcata 60  
 tgtccctggc aagtttactc gttccgtact aagtatcttg tgcattataa gtgcaggtgt 120  
 tattggtgct gtgggagttg tttgttttat attctgtagt atcaatccga gaaacgttat 180  
 catcaatgta tatctcatta tatttgcagt gttgataatc ctttccgagt tgggtttcag 240  
 ttttctgttg aagcggtttg cgttttttaga tacgtttttt 280

<210> 2054  
 <211> 340  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-041-Q1-E1-B4  
 <400> 2054  
 cgcgtccgac aaaaaaaaaa tcaataaaaa taaaaacata atcaaggctg acgggctaaa 60  
 agaggcagac tttcataggg tcaatgctac gtgcccggtc atgcaaagtg aaagctcttt 120  
 taaagtgatc gggaatttca tttcaacggc cgtccttgga aaatgccggg attgggaaaa 180  
 gttagccctt tgcaaggta agccccttcg ccaacatggc ccattcccaa actggtctaa 240  
 tagtttcccc gttctcaaaa tttgcccttc ccaactgttg atcggacaga gtcgattaat 300  
 gggacattcc cgttttcggg cctttaagct acgccccttt 340

<210> 2055  
 <211> 409  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-041-Q1-E1-B5  
 <400> 2055  
 ctttcgcata gtcgggaatg ggtcctcggc gtcgtatatc gatactagtt gactgccttc 60  
 cactggccca aggtttggca angaacccca gaacctagat taagttactt taaaagaaac 120

ttgcaaagta ataatttctt ttcgcaaaat atctgtggtc acaatggacc acatccttgt 180  
 gttttgcccc tcaactgtttt ccacattggt tcaatggcgt cacacttggt acaagtgacc 240  
 cgtaagggtc gtttcttgaa ctgcacttga acccaacgcg atttaaattg acgggatttg 300  
 gaaaccacgg taagttattt gtcccataag caaaacgtcc agatgattat tggtcgttgc 360  
 tactcctgga taaaacatga ggaaaactac accgccactg caaaggcat 409

<210> 2056  
 <211> 353  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-041-Q1-E1-B9  
 <400> 2056

tgttgtgcta tacccttttg gaggaagctc atggaaggaa aggatcgtcc aagtttatgg 60  
 aaaaaagctt tgaaccgtga tactgtgtgg gaaaaggacg agatattaga tgtgctgttt 120  
 tggatccgcc acgtggtagc tctgttgata ggttgtctat tcggccttct caaattaact 180  
 ggcttaccag gctttattct ttacatatct atttggttca ctatttctca ggcgtaagtt 240  
 tcatgccttg tagaaagaaa gaataacact actcgttctt ctttctagtt atttcaagtg 300  
 gtttttagat ttagacgaag acgactttgg tggttgggga accgtacaac aag 353

<210> 2057  
 <211> 400  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-041-Q1-E1-C11  
 <400> 2057

gtggaaaact ggccttttat caattcttcc ttcttaatat cacaacaacc taatagggag 60  
 atatagagtc acgcaaatac gtgttgcaaa ttgggaagat attcaagaaa aaaaagttgg 120  
 gagagcgtgc gcaacgcttc ggctccgctt cctttaggaa tgaagaatga aactcgcgat 180  
 gaacatacaa gtactccaac gaccaccgca gaggttccta ccaaccgcca acctatcata 240  
 caccgacgtt ttcagacggc gcctttggaa gatgacgcca tgatggaaga cgacgatcaa 300  
 gtcgtttcta ctagtatctc ttcttgata tagcaacaaa gcgctgttgg acaaaagtcg 360

gatgcaactc ccaagttgct ttccctcggt gtcggtattt

400

<210> 2058

<211> 409

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-C12

<400> 2058

ctgcctttta gcattcttct tcttatatca gacaacctat aggagataag agtcacgaaa 60

tactttgcaa attggaagat attcagaaaa aaaagttgga gagcgtgcg aacgcttcgg 120

ctccgcttcc tttaggaatg aagaatgaaa ctgcgatga acatacaagt actccaacga 180

ccaccgcaga ggttcctacc aaccgccaac ctatcataca cgaccgtttt cagacggcgc 240

ctttggaaga tgacgccatg atggaagacg acgatcaagt cgtttctact agtatctctt 300

cttgatata gcaacaaagc gctggttgac acaagtcgga tgcaactccc aagttgcttt 360

ccctcggtgt cgttatttct ctatctcttc cgctgcattg ttttcttga 409

<210> 2059

<211> 402

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-C3

<400> 2059

aagcttaaac aaactagtaa gtcggttga atgttgcttt ctggagcgaa gtcgtcaaga 60

agggtccaaa atgggcacca tcttctccca agtagcacia tcctttgcaa aggatatgtt 120

ctatctcaag tcgcaagggtg aagaatggct agatgctgtg ttgcaagatt attcattcct 180

tgctcgtgac gcccgcggg ttttaggtga acgtttacaa gcatacgaat cttatgaaaa 240

ggctctatca gaacacaatg aaaggatgag aaaactggaa aatggtcata tgtcctcttc 300

cacgtcctcg caacacacgg aaaaccccaa ccacggtgct acttctagta gtaagcagtt 360

gaatgagtgc cgtcagttgt atgaacgagc ggcttatttg ac 402

<210> 2060

<211> 409

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-C9

<400> 2060

accacgcgtc cgccacgcg tccgggttgc tcaaggtgtg aaatggcagt agttgaagat 60  
aacagagtct ttgttggtgg tcttccttgg tcagttagtg aagaagacct tcgtgaaact 120  
ttttccaaat atggagaagt tgttgatgca agggttgttg ttgaacgtga aactggtcgt 180  
tcccgtaggtt ttggtttcgt atcctatgca gaaggttcct ccgtagacga atgcattgcc 240  
gcactggatg gcaaggatat gcaaggacgc actattcgtg tgaacaaggc aatgtctcgt 300  
gaacaacgcg agagtggagg agactttcgt cgcgggtggc gtggaagata cggagggtttt 360  
cgttccggtc cttatgagag acgtgaacgt gactctgatc gtagaagag 409

<210> 2061

<211> 429

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-D10

<400> 2061

gttgagattt tgtggatgag caaccacttg tcgttgcaag aaaccaagtc gcattttcgt 60  
aaccgagtca atggactgat cgagcatatt gcgagtagct tgagggtata aagagagaga 120  
gaatagttgg aagttttgtc ttttgaaata cataggactt gttgacgacag ggagctgaac 180  
ccagtccgtg gaaagactat gcaggggacc ttgagttgag actcgctgta taaagtattt 240  
gtagggattt tgaagagctt ataaccttgt cgtttgaaat acaagtgttg acaactcaag 300  
gcaatctacc ccaaataatg tcggaaatag accacataga gacgtctgtg cagaaccgca 360  
taggagagat taacgatgca ctggaaaaaa cgggtatgca cttgtctttt cacgtctgca 420  
acgactcaa 429

<210> 2062

<211> 289

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-D12

<400> 2062

tggaaacaga ggtggtattg ccatggcgaa acatcacctt gaccttatta tgtgtcgaaa 60  
gcaacctgga atagccgtcg gaagactttg tgaaaagtgt aagtgttatc ttctctttat 120  
tttgttctcc tcatacttgc aaggtgacgg caaatgtgtc atatgtgact cttacgttcg 180  
gccttgtacc ccggttcgca tatgtgacga atgcaactac ggctcatttc agggacgttg 240  
tgtgatttgt ggtggtgtcg gtgtcccaga tgcttattag tgtagagag 289

<210> 2063

<211> 447

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-041-Q1-E1-D2

<400> 2063

attcaagggg cgnacgacgc gtccgggaca aagcaacaac gcgagtgggt gataaagcaa 60  
ctagccaaat atggtttaga acacgtcgac gagttggttg actatctttt acagtgtgaa 120  
gataaagtta ttcttaagga ataccttggt ggtttattac ggaatgatga ataggccgaa 180  
gcacttggtc aagaattggt tgccaaacag gaagctacca acgaacaaac agatggaaaa 240  
ggaaaagaca caccaaggta caataagaaa gttcacaag gtcgcaaaaa atcgtatggt 300  
ccgagcaaag atagttcttc cacggagaat gataacaagg ctagcacacc ttttatgcga 360  
aattgtttgt gctgtgggaa ggtaatcatg gaatatatca gtcgtttag tttttgtggt 420  
tggtcaccgg aagaagatgc tgagaaa 447

<210> 2064

<211> 402

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-D3

<400> 2064

cgcacgcgtc caaagaagat caaacagttg ccaaatgtat ttgggacact ttgcatatag 60  
aaccactcaa tgttcctgag ttcaattctg gtcaaccagg atatgtaatt ccggtcacc 120  
gagacagtat gattgcattt catcaaattg aaggaatgaa ggatgcacag aacttgtttc 180

gaagatttta cttggataag aatcgatttg actcgggagg agatgtcggt ccgtaaagaa 240  
aaccaactct actcactcac atgtctatga cgttgccctcg ccggaaacca agtcattcgg 300  
atcaaaatat attcctttta cagtaccatc gatacgagca agtatctgat gagtcacttt 360  
catagcgtcc acgacgaaaa tatgatcacc ttgtttcact tg 402

<210> 2065  
<211> 457  
<212> DNA  
<213> Cyanidium caldarium  
<223> unsure at all n locations  
<223> Clone ID: LIB190 041-Q1-E1-D4  
<400> 2065

attcaagggg tcgacgacgc gtccgcagct tacaagttat tggagattt cttgcagaac 60  
gaatatagtc ctcattgtag aagaaccgct ggcattgtcg attggaacga ttcaaaagcc 120  
atztatgaag gagcaataga atattataca tctttgtctt ttacagctca agagttgcac 180  
tctattggga agaaagaagt gaaaagaata tcggaagaaa tcgatcaagt acgagaacgc 240  
ttacaacaaa cacaaggatc acttgcaccc tttattgccc aattacgaca aaatccacaa 300  
ctctttgcca aagactcgca agatattata gaaacatata agaacatact ggataagatt 360  
ggcaccaatg tttcagatta ctttgccaaa cttcccagag cacgattgga actaaaacct 420  
atcgagtcac atcgagaana gtccgctcca cccgcac 457

<210> 2066  
<211> 427  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-041-Q1-E1-D7  
<400> 2066

acggacgcgt gggcggacgc gtgggcggac gcgtgggttt tcaaccgttg ttgttctgac 60  
aatgaagatt caattgttta tataatagcg atacaagggg gcgataaacg acgaatttca 120  
ggctctaagc tatccatgtt tttgcattgg cgtgaaaacc ttactttctca agtgacaaat 180  
gtatctggac gactcggaaa acagtattag tggttctaagc gtcactataa gacgcgcgcc 240



gatcattcga ttttggcttg caagttgaat ttgtctcacc gagaaactcc ttcaggctta 300  
 tgcttccatt tgaacacttg ctatatctgg caacgtctga ataactgggt ttcacagtaa 360  
 agaaggggtgc aagcttgatt tgatgagatg cataccattg ttgccgctgg acctgtagct 420  
 ctccaat 427

<210> 2067  
 <211> 413  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-041-Q1-E1-D8  
 <400> 2067

agtacccatg agaagtcagc tacttcaact gtccaaagtg tttcaaactt ttacagaaaa 60  
 acaattttca tctagcgtet ccaagttcca gcttcccgat ctaccctatg actatggcga 120  
 gttggaacct tacatcagtg cagaaatcat gagacttcac caccaaaaac accaccaaac 180  
 ctatgtcaac aacttgaatg tcgcattgga aaagatccac aaggcagaag aagctggtaa 240  
 cgtgggtgat atgatcgcg tgcaaaagat gctcaaattt aatggaggag gtcacgtcaa 300  
 tcactccatt ctttggcaca acttggctcc cgtgaataaa gggggaggta ctgccccga 360  
 tggagcattc ttaaaagcag tggaaaaaga attcggctca ttggacgctc tca 413

<210> 2068  
 <211> 350  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-041-Q1-E1-D9  
 <400> 2068

tcgttttctt gtgggatggt ttgtctcctc atgcttgcg cgctgctggc attggtcatt 60  
 cggttggttc gtgtgccttt tctgtctggc cactcgcttg ttctgcatct ctgtctttta 120  
 cagcgcacga gttggctcta ttgggaagag agaagtgtat cgaatatcgg ctgaaatcga 180  
 tgctgtacga gaacgcttac acaaacaca aggatcactt gcacccctta ttgcccaatt 240  
 aggagaatct ccacaactct ttgccaaaga ctctcaccat attagacaga tatctgatac 300  
 catattggat aagattggca ccaatgtttc agattacttt gccacacttc 350

<210> 2069  
 <211> 419  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-E10

<400> 2069

tgaactttgt tttggaactg tttttttggg gtttcaactcg tgtgttttgt ctttttaaaa 60  
 ctcgaagaag actattttatt tcttggttatg tttgagaggt gtttctagag tgtgttttgt 120  
 ggacttggtg tactcctgtc ttggtgggtg gtgaatggct ctagtgacaa agaggggtgt 180  
 cactttcccg ccattctcca cagcttcaac taccaacctg tatacgcaca caactacaca 240  
 actatattac tacagagtcg tgggtgtaaaa cgacaagttg aatggttgaa aaggattggt 300  
 gaaaagtggg agactagtga gagagagcac ttgaaaactt gtatatttgt accccctagc 360  
 aactatttcc tcttgaagag attgcaagtt tgggtgtagta gacaagagtt gcaagtgtc 419

<210> 2070  
 <211> 335  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-E12

<400> 2070

gtaaaagaag aaagagaaag gaaaaaactg agtaccagga agaaaagagg gagtagatga 60  
 ggaaagaaag atcaaggaag taagagtaag agaaggagta atgtgaatga aagcaggaaa 120  
 gtatttgaag aagagagtgt aaagcgcgta ccttttgcac aatgtcccag cgagtgaag 180  
 aggaagcata aagaaagaaa aagaagtagc caggtaagac ccgaagctag ttgatcttat 240  
 gctgtccaag cgaagtaagg ctgaaccagt atctgtggaa aaagatttgg aagttaaggc 300  
 aaaaacacgt gccagcagca gcggtaaaac gtgtg 335

<210> 2071  
 <211> 328  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-E4

<400> 2071

aaccacgagt ccgcccacgc gtccgccagg aattttcatt ggtttttatg gacgttttgt 60  
tactattgct tggttctatg ccatgtttat gatgcctgaa accaaagata agactttgga 120  
agagattgat gctttgtttt ccatgtcgat gcctgattta gcgaaacata attgggataa 180  
tgtgaagaag acagtggatg atctcttgca ttttacgttg agagaagttt ggaaggttta 240  
caagtgagcg atgattgtta ttgtttgatt ttttgagtat tttacttggt tggtaacaat 300  
aaaagcataa atgcgtgcat aacatttc 328

<210> 2072

<211> 390

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-E8

<400> 2072

acccacgcgt ccgcccacgc gtccgggaaa tgagtatttt cgcaataaac agtacaagga 60  
ggcatgagag tgttatactg ttgctcttag taaagaaatg agtacagaag accgggcagc 120  
gtgttttgcg aatagagctg cagcaaagct aaagttggag gactatgaag gggcttttga 180  
ggattgttcc gaagctttga gcttggatga aaactattgg aaagcaaagt accgacgaaa 240  
ggaatgctat ttgaaactgg gtcgttatga ggaagctttg aaagatgcaa aggactaag 300  
agaagcacia cagatatctt cggaagaagt acaacatata gaaaagtga aggagcgaga 360  
cgatgaaaga cgtaaagaag aagctattgc 390

<210> 2073

<211> 409

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-E9

<400> 2073

cattttgtag ttatgaaagg aataacaaaa tgctctctta ttgttctcat agttaccact 60  
cttatggtaa ccacaacttc ggcagttttg ccgatgaatg acgaactggc tagagaaata 120  
cgtagagctc ttcaatggaa ctctgaattc ctaagacaat tctcgacagg attcccgta 180

gctaccgagg ctccgatacc aacagagata ccgataccaa cggagatacc aattccaacg 240  
 gtgacaccaa ctctgcgcc tactgctacg tccgtttcga ccacttcagc ggtgccaact 300  
 ctggtaggaa cttcaagtaa cccaatagtg actgtaatac caacagctcc accttccgga 360  
 tttctcttc cttctggctc gattcgaaaa gccttctcga aagctgaac 409

<210> 2074  
 <211> 311  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-041-Q1-E1-F10  
 <400> 2074

gcaaaccxaa taatggaatg ggtgggattg caccggccaa agaaccgggt tcaaccaacc 60  
 gttgcaaaat atactttgga tactttgttg gatactgtgc ctgcttctgt tgccggcatt 120  
 gcctttcttt cgggagggtca aacggaagag gaagcaacga cccatttgca agctattcgt 180  
 gaaagagcaa aggcaactgg aagagcacct tggccattga cattttgtta tggctcgtgca 240  
 cttcaagcta cgagtttaca aacgtggcaa gggaaagcag aaaatgtgga gaaagcaaga 300  
 gaacaatttt t 311

<210> 2075  
 <211> 421  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-041-Q1-E1-F12  
 <400> 2075

ttatggtgca aaaaactttg ctgcaatatt gcaattgcaa ttagaaaaaa taaagggtca 60  
 aaactctttg gactcggctt tgctttgtat caaaaccggc aatgaanaga atccgagact 120  
 gtcaagttac ccctttttgt cggtagagag tgacggggca gtaccaagac gccatgacta 180  
 cgcactcggg ggcacataat agagaaagac taggggcaaag gactgatggt gattcgataa 240  
 agagtaaaga ttcgtggcac tggtagcgta ccaaccgctg gctcgtcatt tacatagcca 300  
 gctggtcgtt gcattgtcac gtgcgaagtg agcttccta gaagaagggt accaagccat 360  
 cttggaatca tccagatttt atatcgattg gtcattcaaa ctttttaaaa aaagtaacgc 420

a

421

<210> 2076  
 <211> 398  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-041-Q1-E1-G10  
  
 <400> 2076

gccttactga aaaccgacac aggtactcaa ggaaaaagga aaccaatatt aaggtgagag 60  
 aatggacgat aaggaactat gcaaaaggat atggatatctg cggtagaaca tatgaaagaa 120  
 gcagcaccga ctgttttagca caaacacatc actctgcaga aaagagaaaa tgtaaagtat 180  
 acagtgtgcg gcctgccaaa tagtagagaa gaaatcgatg aaagtgaaag cgagtaaaag 240  
 atgaggtata gagaatggcg gtcctaactg taaggatcca aaagtagcga agtaaataaa 300  
 cgtttgaaag gcgtccagta tgaaaggaga aacgagtgtg gcactgtcta ctcgtccaac 360  
 tcagcgaaac agcaataact gtgaaaatgc agtaaact 398

<210> 2077  
 <211> 429  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-041-Q1-E1-G11  
  
 <400> 2077

accacgcgtc cgcccacgcg tccgcctttt tgtactcctt caccaacttc taggtacaag 60  
 tctccgctta ggagaggtga ttggccagaa agctgggagt ctgctcgaag tcttggcgct 120  
 agttcgggtcc aaccaaaga ctcagaaaca gttgtatctc gggatgaagca tatgatttca 180  
 atggttattc aaagaagcac ttgtctttct ctagcgactt tggataaatg gctgtcttta 240  
 ttgtgtgatt ttatagaatt caatgctgac gagtatctac ttttcctcgt aatgctaagg 300  
 aagtatttaa tatccaacgg tcagttgcag agccttgaag atcacgtgag accacagaaa 360  
 tgggagcgcg ttcttgctgt ttgtgcatac tttgtgtcc tcttatcaga agagtttact 420  
 ggccgaatc 429

<210> 2078  
 <211> 398  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-041-Q1-E1-G12  
  
 <400> 2078  
  
 ggagtagaaa agagctttaa aggatttcac gggaaaatct tgcaatgaaa aaaacggttg 60  
 gccactgaat cctggaaaacg gagcttttta cggcccaaag attgatgtga aaatccacaa 120  
 ttccttacag aggaaacatc agagcgcaac gattcagctg gactttcaac ttcccattcg 180  
 ctttgatttg gtgtatcacg cacctagtcg tccgaaacaa gattcttctc cactgagga 240  
 agaagagcct gaactgcacc gtccggtgat tattcatcga gctatattgg gttcgggtga 300  
 gaagtttttg ggaatttata cagaacattg tgctggcaaa tggccttttt ggttgagtcc 360  
 acgtcaagtg atcgtcaatc ctgtaagtga gaaatata 398

<210> 2079  
 <211> 422  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-041-Q1-E1-G8  
  
 <400> 2079  
  
 cacgcgtccg cccacgcgtc cgaacctcaa gtggatcatt ccacgttggt aaagatagac 60  
 ttgtctcaag gcagctttaa agtactccaa gactgtgaca aagatttaga atgtgatcat 120  
 aataccaagt ttcagttgga acttattcag tatggtctct tttcacctgg tttttggacg 180  
 agagaaaatg ttctgtctct ctatttgagg ctctgtgcag gtgtattcat aaggacact 240  
 ctctaccttt tctacaacaa aggtgaagaa catttggttg cgagtttaat gctgttggtg 300  
 gagacacaag tctcactgta tgcagacata aaaacaaact gggagaaacg acactttatc 360  
 gttggcctca tcgtcaggtc tttgtgtgag gaatatcaac gacagtattc agagctatgt 420  
 tc 422

<210> 2080  
 <211> 391  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-H10

<400> 2080

gtccaggtct ccgggtcgat ccaaggacgc gatgggtttt ctccccaaaa gatgtccaaa 60  
gcatttggtta tcttagtgag acttgagaaa ctatgcgtga atcatagcaa gtattgttct 120  
cgtattcact atgaccatca gatggataaa actcgatatg gttattattc catatttcgt 180  
cgtctatttt ctactcaaaa acaacctttg gaccatggag acacaactcc cataaagtca 240  
tcttctgctt tgtttgctgc accacagttg gatagtgaag gaaccaaagt ctctcctttg 300  
tataaattgg gaaaattgaa tcacattgct attgtagttc aagacgtgca agacgcagca 360  
gagttgtata gaacagtgtg ggaagcagat g 391

<210> 2081

<211> 96

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-H11

<400> 2081

ccacgcgtcc gaccacgcgt ccgcccacgc gtcagtcctat gcgtcaggtg tctcgtgcgt 60  
ggccgcgttg gtcgactcgg tccgtcagtc acacat 96

<210> 2082

<211> 124

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-H12

<400> 2082

tttacagaca tttaggggtt atgcctcgtc cttctcctcc tgaatcttct atatcgacga 60  
ccattacggg aaaagcgatt tgtagttagg ttctgcgct cttagaggac ggagatcgcg 120  
tatt 124

<210> 2083

<211> 430

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-H2

<400> 2083

ggtcgaccga cccgtccgag tagaaaaaag agagtgtaag gcggcgatcat aatagaaatc 60  
cgaaaggagt agaagaaaag agagagaaga aagaaaagaa gagaaaagcc gtactgaaga 120  
ccgacacagg tactcgagga gaaaggagac ccaaattaag gtgagagaat ggacgataag 180  
gaactacgca aaaggatatg gtatctgcgg tagaacatat gaaagaagca gcaccgactg 240  
tttagcaaaa acacagcact ctgcagaaaa gagaaaatgt aaagtataga gtgtgcggcc 300  
tgccaaatag tagagaagaa atcgatgaaa gtgaaagcga gtaaaagatg aggtatagag 360  
aatggcggtc ctaactgtaa ggattcaaag gtagcgaagt aaatagacgt ttgaaaggcg 420  
tccagtatga 430

<210> 2084

<211> 292

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-H3

<400> 2084

acgcacgcgt ccaccacga gtccggtaag gcggcgctct actagaaatc cgaacggagt 60  
acaagaggac atagagaaga gagaaaataa cagacatgcc gtactgacta ccgacacagg 120  
tactcaagga gacaggacac ccacttcaat gtgtgagatt ggatcgatca ggaagtaagc 180  
acacggatat ggtacctccg ttgacactct gactgaaaca gcacctactg tttagtaaga 240  
acgcaccaat cttctacca gagataccgt atcgatatata gtgtgcgtcc tg 292

<210> 2085

<211> 444

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-H4

<400> 2085

gtctagggtc gacggacccg tcaagaaaca aaaatatattg tcgttttttg cgccttttgt 60  
gtatcagcgt tttctcgtgt gttgttttac ttggaacgct ctgttgattg aatgttttca 120



ttctaatttc tttgtagtcg aaaccattcg agggtttgtt acactgactg ttggtgcccc 180  
 tgtttttagct cttgccgcta gtcttttcgtt tgcgcattat tatcgacgca aaagtatgcc 240  
 gattttttgca aaggaagaca cattttttcga gtgatggaac aagggtttgcg aaaataaaga 300  
 atagtgtgtg tatttcgttg aaaaaaaaaa aaaaaaaaca aaaaaaaaaa aaaaaaaaaa 360  
 aaaaaaaaaa acacaaaaaa aaacaaacaa aaaaaaaaaa atttaaacc caaaaaaaaa 420  
 ccatttaaaa aaaagggcgg cccc 444

<210> 2086  
 <211> 427  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-041-Q1-E1-H5  
 <400> 2086

agtctttgaa gtgaaagcca ctgcaggtga tactcacttg ggaggagagg actttgataa 60  
 tagactagtt gactatcttg ccaaggagtt taagcgcaag tataacaagg atatcacatc 120  
 taaccatcgt gccatgagaa gacttcgaac ggcattgtgag agagcaaaga ggactctttc 180  
 aagtgccact caaactacga ttgaagtaga ttctttgtat gaaggatcgc acttctacac 240  
 cagtattacc agagcgaagt ttgaggactt gtgcatggac ttgttccgga aatgcataga 300  
 ccccgtaggag agagtcttta aggactctgg attgtccaag agtcagattc atgatgttgt 360  
 gctagttgga ggctcaactc gtattccaaa gggttcagcag ctgctgcaag actttttcaa 420  
 cggcaag 427

<210> 2087  
 <211> 402  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-041-Q1-E1-H6  
 <400> 2087

agttgttttag tcgaagaatg gcaaaaggag aggcaggagc ttcaagggtca ggtggagcag 60  
 ctaagaaaaa gaagtgggtca aagggaaaag taagtgttgg aatgaattga ctgtggaaaa 120  
 ttaatatcct gcaaaggtaa aagaaaaagt atccaacacg gtgttcttag atgaagagac 180

ctacgaaaag ttgtacaagg aagttcccaa gtacaagcta ataactcctg ctattgtttc 240  
 ggaacgtctt cacgtaaacg gtagtttggc aagacaggct atcagagagc tgttggcaaa 300  
 gggtcagatt tctcttgtgt cgtcacagcg aggcaactctt atatgctcca gagcgggaaac 360  
 ggcgggcatga ctttttgctt tgaaataaaa gcactttaga ac 402

<210> 2088  
 <211> 223  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-041-Q1-E1-H7  
 <400> 2088

gaaaccactg caggtgatac tcacttgtga agagacgact ttgatactag actacttgac 60  
 tatcttgcca aggaatttaa gcgctagtat aacaaggata tcacatcttt acatcctgcc 120  
 atgagaacac ttctatcggc atttgagaca ccaaagacga ctctttcaat tgccactcaa 180  
 actacgaatg aactatatctc tttgtattaa tggctctgac ttc 223

<210> 2089  
 <211> 411  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-042-Q1-E1-A3  
 <400> 2089

gtccagggac gcgtcagaca ttctgagtgc gctgatgagt cgatgaacaa gcttcagttg 60  
 ctattcgtaa tcagtcaagc tgtttcaata gcatggcaga gagaatagat caggttatac 120  
 tccgagaaca aatcagttgc atgaggaact ttgggaacca tgtggcatga acgagattct 180  
 gcacagtaga gcgcgtactt tactcgtgaa gatgagcagg cagtacaaag gtagcatca 240  
 aaacttcggc atcaagttgt gccatcagac gacgtattcg cccaacacag ataaggcgtg 300  
 gcagagatct tacagttcca ctgtgtcaag tctaataaaa ctttgagtga agatattgtc 360  
 cgtttctttc attacttcat ccgtgattga tgtttagctg cagttcaact a 411

<210> 2090  
 <211> 226

<212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-042-Q1-E1-A5  
 <400> 2090  
 ccgggccgac ccacacgtcc agggctcgca taggtaagga aaatgtaatg attcactttt 60  
 ggaatctatc catttttggc aaatttggtt tcaacctgat tttgtatac taaggataat 120  
 aaagatacgt tgaaaatttt ttgtattcct tgatgacttg tgaaatggaa ttgcgtttcc 180  
 aactcgtgta tgtagtctct ctttaataaa gttcccaact tggaaa 226

<210> 2091  
 <211> 409  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-042-Q1-E1-A6  
 <400> 2091  
 ggagaaaagt tttgtcgggt cgctcgtcgc gatttttctt tcgacttggg cgccaatctt 60  
 cttcttcttc ttagaatgaa attgaatcgc gctaattccg ctactgggtg tcagaagcaa 120  
 atagaagtgg acgacgaaag aaaacttcgt gctttttttg acaaaagact ggcgcaagag 180  
 gtcccaggag acgctctagg agacgaattt aagggatata ttttcaagat catgggtgga 240  
 caagataagg aaggattcgc tatgaaacaa ggagtcttga ccactgggtc tgtaagactc 300  
 ttattaaaga aaggagactc gggttgccga gggtagcgta tgagagacgg tgaaagaaga 360  
 cgaaagagcg ttcgcgggtg cattgtatct ccagatatag ctgtgttga 409

<210> 2092  
 <211> 404  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-042-Q1-E1-B6  
 <400> 2092  
 acggacgcgt gggcggacgc gtgggcggac gcgtgggcgc gacaacaaca acaggaaatt 60  
 cattgatgga caaacctcaa gtggatcatt ccacgttggg aaagatagac ttgtctcaag 120  
 gcagctttaa agtactccaa gactgtgaca aagatttaga atgtgatcat aataccaagt 180

ttcagttgga acttattcag tatggtctct tttcacctgg tttttggacg agagaaaatg 240  
 ttctgctctt ctatttggag ctctgtcag gtgtattcat aagggacact ctctaccttt 300  
 tctacaacaa aggtgaagaa catttgtttg cgagtttaat gctgttggtg gagacacaag 360  
 tctcactgta tgcagacata aaaacaaact gggaaaaacg acac 404

<210> 2093  
 <211> 238  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-042-Q1-E1-C3  
 <400> 2093

aagggaggaa agaaagattc ttcaaagaaa gaagccacaa gtaaacctgc agcagcagat 60  
 gctacaaaga cgacagaaaa gtctgggtccg gaagccaagt tgaagggaac tgggtgcaaag 120  
 aaacaataaa aagttgacta tgcattgttcc tggtatgttt tgtgagttct gtttgatagt 180  
 ttccagctat tcttttggta gtgaataaag agaaaatttt ttatatttac acagagat 238

<210> 2094  
 <211> 413  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-042-Q1-E1-C6  
 <400> 2094

aaagaaagga agacacagta aatgaggcga gaaagcatag gaagtgaac ggattaagaa 60  
 cccgtgtagt ctatgcagta aaagaaagaa tgagtaagaa aaaaggaggt cattcgacca 120  
 ggggagtaaa ggcgcaagaa agaaacccaa agcaattgac gggaatcga aaaaggggtg 180  
 gatcacgtaa attaattcca tttaaaccga gaaccttacc tctccaagaa ggtgttgac 240  
 ggctgtcgaa agaactgtgt gtgaagtgtg agaactgtac agaaagccaa gtgatgaaaa 300  
 gaaggcaagt agaggcggtc ccgagaaatg agaggcgta agactgtata cagagtagga 360  
 agaaacgaga agagagctag aaacgatgta caagaagagt aaaggactag aag 413

<210> 2095  
 <211> 421

<212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-042-Q1-E1-C9  
 <400> 2095  
 agttgattcg aggaaaaacc ttggaagaag cgagtaaaat taagaataag gaaattgcag 60  
 aagagttgaa gctacccccca gtgaaactac attgtagtat gttggcggaag gatgctatta 120  
 aagcagctgt caaagacttg caaaagaaaa tgggtgcttc cagtgcctaa aagacgatgg 180  
 aagtttctag tctttctctt cctccttttg tgtggagaag agttgtgtgt ttgtgtgggg 240  
 gaagagaaga attggtgtgt gagtgaatag aatattattg gaaatagaag atggaaaagg 300  
 caatagaagc aaagaataga ggaaatgctg cgttttctgc caaggaatat gacaaggcag 360  
 tggaagcggt taccgtaagt tgctggactc tggaaccctt ttgttgatat ataaatatat 420  
 a 421

<210> 2096  
 <211> 355  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-042-Q1-E1-D11  
 <400> 2096  
 attgtgattt tacgcaatct ctggaggaat atcgaacacc tcaataaacc ctttgtgtgt 60  
 ggaagtgttg ttttgaaaat gttaggcttt gtctcaggac agtctctgag ctactttacg 120  
 tgtatgaaca aagacgagag tttgctttta aagtgtaaac gtcgggtacc atattcacga 180  
 attcactgta agccaagtca tttggctgac aagagactaa gacggacttc tcgtaagtgc 240  
 tgcttagttg cgttcgtata gttgcagaat ttttcctcag tttgcgtttc gtgtcacagc 300  
 ccttcaagtg actctgagca acagttggcc tgttttcggt ggggtgcgtta tatgc 355

<210> 2097  
 <211> 394  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-042-Q1-E1-D5  
 <400> 2097

accacgcgtc cgccacgcg tccgcaagat tgttgtttcg tagtttatgt agcaacaatc 60  
 ggaatacttt tcgcgaggaa tgggaacatt taccgcaaca agaacaagaa tggaaaagag 120  
 caggcaatac ggaaaaacaa ggttcattgg gagaaagaaa accctaccct ttgaagcctc 180  
 ttgacttgga taccagatgg agtcttgga gcttgaaccg tgccatactt ataggatatg 240  
 tgggtaatga tccggtgaaa agagaaatct cttcgagcac ggctgcttgg atgtttccct 300  
 tcagtaccgc ttacaagaaa agaacgggag accaagaaac aatcacgat tggcacaatg 360  
 tgacagttta agcctcccc tccgcaaagt tttt 394

<210> 2098  
 <211> 408  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-042-Q1-E1-D6  
 <400> 2098

actcaacgac gtaatgagac tcaactcattt tctctttggt ttgtcttttg tagctgtttt 60  
 cctcgtagct catgcagttc ccgttggaga agatgcattc agtttcagtc agacttttgg 120  
 aaatgcttct gtttcaggca acgcctctgt tattccagct acaaccaaga tccccaaagt 180  
 agaagtaact agtagtgctt catcaaagga caatggaaaa gcagctcaag tagactttgc 240  
 agattactca aagggatata cttcgccctag ctattttttac gctccttctt acacatccta 300  
 tgtggaattt cctcaatata catcctatcc atcatggcct tcttttaatg agcagcctgc 360  
 ctttggtggc ttcgatccca atgcanagtt tggagaatcc gaaatttt 408

<210> 2099  
 <211> 399  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-042-Q1-E1-D8  
 <400> 2099

cccacgcgtc cgaagggatt ttgaaacgca aggaaaaaga atattgcgtg agtttggttt 60  
 gcagtcgatt attcagcaga cgccatcggt taggaattct attgtgtgtc actcagttgg 120

tagagatgga ctgattgttc cttattatct catagagaag atgaaaatga agcgtcaact 180  
 ggaaaatcta atagcacaac gacgtagcgg gacctggaca gtggaaggaa agaaaggaaa 240  
 agttgatgta aagaaatatc actggacggc taaggagaag aatacctttt tcagacttgt 300  
 gaaagaatta ggggtgcgact gggaaaagat tgcggaacaa attcctacca agtcaccttt 360  
 gcaacttcgt gccttttatg atgagtacat gtcacagag 399

<210> 2100  
 <211> 359  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-042-Q1-E1-E11  
 <400> 2100

accacgcgtc cgcccacgcg tccgatcgtc ttccacgcgg aagtaatatg atcgatcgaa 60  
 cagcattgcg caatgttgga atgcagtatg taacaaccgc ggatgatatt ggacatcgct 120  
 tggtcgtaga gatccaacta aaggaatcca gcatatataa tagtcacatg aaggaaggag 180  
 aacgacaaaa tgcggttaca gatatcattt ctacggaccc tgaaatggat aggaaagtat 240  
 ctcagtgggt gtcggaagga caaaaggcat tcttagtaga agatgagttg acgggtgaac 300  
 gtcgaggaat attcttaagc tcaaccaaatt tgaaatttca gaaacaacca attcaggac 359

<210> 2101  
 <211> 406  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-042-Q1-E1-E2  
 <400> 2101

accacgcgtc cgcccacgcg tccgcgcggg ttaggtcatc aagtagcaac cgatgccttg 60  
 cagttgatgg aagaagctat ggcaaaggat catctaaagt tgaacgatcg tcagcttgct 120  
 tgtgctcgaa tacaatcgaa accaggtcag gattacttgg aagctatggc agctgcagct 180  
 aattttgcct ttgtaaatcg ttcttccatg acatttttag cgagacaagc cttttctaaa 240  
 gtattggatg ccagtgcaga tgacctcgat atgcatttgg tatatgatgt gagtcataat 300  
 attgcaaaaa tagaggaaca ttggttggat gggaagcctg ttcagctttt agtgcacgt 360

aaaggtgccca ctcgtgcctt tcctcctcat catccactca tacctg

406

<210> 2102  
<211> 263  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-042-Q1-E1-E4  
  
<400> 2102

gcagtccatg ctcagctgca tactgccacc tgacagtttt gcaagtttca tgtatgtatc 60  
tggaatatgag aagtttcctg atcatgtgtc ccgtatgcct tggtaacaaa cctgcggcta 120  
gaattgtgaa gcgaactact gctgttgcaa aattcagcaa acacgcctac tgttaatgca 180  
gtgggtctaa ttgaatcacg actgtctcat aatgttttga agtagcattc cagaatacat 240  
acagttgtac ccaagttctt gcc 263

<210> 2103  
<211> 389  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-042-Q1-E1-E5  
  
<400> 2103

cacacgtcca ggagtataac aagacagaga aaggaaaaaa ctgagtatca ggaagaaaag 60  
agggagtaga tgaggaaaga cagatcaagg aagtaagagt aagagaagga gtaatgtgaa 120  
tgaaagcagg aaactatttg aagaagagag tgtaaagcgc gtagcttttg cataatgtcc 180  
cagcgagtga aagaggaagc atagagaaag aaaaagaagt atccaggtaa gacccgaagc 240  
tagttgatct tatgctgtcc aagcgaagta aggctgaacc agtatctgtg gaaaaagatt 300  
tggaagttat ggcagagaca cgtgccagca gcagcggtaa aacgtgtgta ccacgcgtag 360  
agcacaggaa ctgggtgtaa aggtcgagt 389

<210> 2104  
<211> 404  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-042-Q1-E1-E6



<400> 2104

ccgggccgat ccaaactgcc aggaaaagag agtaggacgt ggcaacggta gtggccgtgg 60  
taactattgt ggaagaggga taaaaggaca aaagaagcga caaggaggtc acgtgaaacc 120  
ttggtttgaa ggaggtcaga cacctctttt ccaaagggtta ccacagcaca agtttccaaa 180  
gacttggtat gataatcatg agttggtatt tttggcagaa gttcaacgtt tcgtggatat 240  
tggcaagttg gatccttcac aaccggtgaa tctcaaagaa ctatttcggg ttggtattat 300  
aagaatgccg tatagaggag ttcgtttagt tgcccgaag gtcgaccggt tttcgtcaac 360  
cttagacttt gaggtaactc cttgtactct taaaccagca caac 404

<210> 2105

<211> 360

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-F5

<400> 2105

agtatgatgc aggcaaagaa gtgacgcagt agatcagaga gtaacacatg caagtaggta 60  
aagcgaacgg gtgagtaaag aggtgtgaaa gagtggaaga acatgaaagc acaggagaat 120  
gtaagaaatg gttagagtaa aaaccataaa ggaagtaaaa gcgggaatct gagaggagga 180  
aagccacatt ggcaactgaga aaagggtccaa acaagagaag tcagcagtgg ggaaaattgg 240  
gcaatgtaca gggaagtatg acccagtaat gaggagtggg gtaaacagaa caggaagtaa 300  
aaggacggaa tgaagggaag ttatggcaaa aacacgtgcc agcagcaacg gtaaacgtg 360

<210> 2106

<211> 430

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-F6

<400> 2106

accaaagcgt atctccgttt cctggaaagc ctttgggttt acgttgctgt aatattcaac 60  
aaaagaaata ctggataaaa cagagatata ataatatagt agtatttcaa gtaatatgtg 120  
cagctaattc gaaacagtct ttgtaccgaa ttcgtccctt gcaacgacaa gtaagaaata 180

gttgagttta caaatatttg caagcaatgt tttcatcac atcctccatg gaagttgtta 240  
 ctgcgaccca tattcttttt ggaaacattt ctgggtctat tgttggtgat gaatataaaa 300  
 gaatcgcaag atgactcgct tgatcaagtt ctctggcac aagaagagac aactggcaag 360  
 tatccatttc taggtcgttt agtgggtggt gttcaattgt ccactattcc caaatgctct 420  
 caagttttcc 430

<210> 2107  
 <211> 366  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-042-Q1-E1-F7  
 <400> 2107

aactctgctg tatagaagac gtagcattac agttgcgcaa gcagattgaa agggtttctg 60  
 gatgtactgc ttctataggc attgggtcga acaagacatt ggccataata tcatccatga 120  
 aggcaaatcc taatggacag tttacgatct ggtcttcgga agctatcgaa taattatcat 180  
 tgttgccagt ggaacatcgt cctgggtgctg gatggataac tcgacgtcgc ttatagtcga 240  
 tgaatatatt tacttgtcag caactacggg aactgtcttt agaaacgtta gatagagagt 300  
 ttggacgaca tacagctcat gctctttatc aagcttgcca aggaaaggat gatagacctg 360  
 tggaaa 366

<210> 2108  
 <211> 206  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-042-Q1-E1-G1  
 <400> 2108

acgacgcgtc caacatgcat gatcaacaat gcaagtagca tacgtcgttt gatgcccag 60  
 acacggaagc aacaactgct tcttcaacta ttgctggtgg atgaagtggg gactttcata 120  
 catatcgag gttgacaccg acagaactgg aacgcctatc acaactagac atggaggcac 180  
 aggagaaaca tgaaaacgag atattt 206

<210> 2109

<211> 406  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-G10

<400> 2109

ctacagtaat gctggacaat gggatatacac tatcacgtgg aaagcagagt tttgtcgtct 60  
tcgagaagaa ctgatgagtg taaagtatta gaagttcatt gtataaagct tggatatgcag 120  
tcatgagtg cactctgtgt atgaaggtag acacctgttt catatgggaa ctataacctga 180  
taaaagcggg tatattcagg tttttgatct tcgaatgatg gtctctggct cggaggatgg 240  
atttaaagtt gtaagactat atacgagacg ggccgctaaa ccactttcag tagagctcga 300  
ttatggaatg aactcatggg acatgttagg aacgaacctc agtagtaaaa tggatgatgg 360  
cacctttggt agcgatacgg taagaatgct gttgaagggt ttaaga 406

<210> 2110  
<211> 376  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-G11

<400> 2110

aggacgcgtg ggccgacgcg tgggcggacg cgtgggcgga cgcgtgggtt gttgggcctt 60  
gtgggtggtga tgccctggat tgagctacgt agtggcaact ccgctgtctt gaaagacata 120  
actgcaagta ttgaaaagcc tgacataaaa tggataacta ggacgaatct cagtacttgt 180  
ctgaattctg cagaaggaaa tgttacggtt gacttgctgc gccagtgtag cttgaaggat 240  
atattttcat tgaagcttct cgacaataac tttaagttgg cgtgttttaa tgatgccttg 300  
tttttagttt taccaggctt atcctttggt attactggta atcgatatatt ctgtagacgc 360  
tcggacttga atgaaa 376

<210> 2111  
<211> 450  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-G2

<400> 2111

ggtcgacgac gcgtccgccc acgcgtccgc ccacgcgtcc gctttgtggg agaaatgttt 60

gaagccttgt gacttgggat tctctttgtc tgtcttcgtg ggcaaaggte gtagctaact 120

tgcgcaactt gttgtttttt atgcactaga atggaagtgt cgtgggtggcg tcttttgggt 180

tggccctcgg aagatcaacc actttcgcag tatattgtgg tcaaagactg tgctttatgt 240

gaggggacac cttttttaca ccagatagct gcagcatact tgcgaaacgg atttttccta 300

gtctatctgt ctgcagagac accatggtat tccctgtact taaatttaag aaagctggga 360

gtacgttttag attctagcca aggtagaaaa cgcataattgt tcttcgatgc ggccgaccca 420

tcggaacga acagcaatga agactaacca 450

<210> 2112

<211> 426

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-042-Q1-E1-G4

<400> 2112

gtcgagggac gcgtcaaggt tgatatctat ttgagtgggt ttagtcataa tatgcaagaa 60

attatgaaaa cgctgactat tataagtacc atattttatc cactaacgtt tatggctggt 120

gtatacgga tgaatttccc tcgaatgccga gaattacact atggatatgg atatactatc 180

ttttggtacg attgttgttg aggagtttct cgtacaagta tatacatgat tgagaacgga 240

acataggttg atggcacttg tcatagttgg gcttgaaata tttatttttc gcaaacgagg 300

ttggatanga agttgatgta tgctgcagat cgaattgtca ggagaactac gctggcttgc 360

tctttgctcc tggaccacaa ggaacaaact ccatcagctt taccgcataa actattgact 420

tgaaac 426

<210> 2113

<211> 382

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-G5

<400> 2113

acggaggcag ttgcaactgc tctgtattgg ttagaacaag atgaagcaaa agggctctaag 60  
 atttatcata ctattagaaa ctgcataaga aaattttgtg aaaaacaaat gcagtacatc 120  
 tccaaagact ccgtgagaca tcgacgtcaa aatcaagggt atatagaaca attgtatgag 180  
 cagtggcaaa gctaaagcta gaaaaagggt tagttttccg gttcttggtc ttttctactg 240  
 ggacgttctc tactatgacg cctatgacga cttgaggaat gccttccatc tctacttgag 300  
 cgtctttctc tactggacct tcttctatgg ctcgagctcg atctccttct tctatgatgc 360  
 tcggggagaac gacttttctcg tc 382

<210> 2114  
 <211> 422  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-042-Q1-E1-G6  
 <400> 2114

gggccgaccc aaacgtccac gttcatgaat gtatTTTTgc gttcgttgat tcgtgcactg 60  
 gcctcccttg tgtttactta ctacagaatt tcgccaaata tggggggtga acaagctttg 120  
 cccgtggctt gccctatagt aagcgaagtt cttagttggt ggcaagtttt ctgtaggaga 180  
 cctgactgga gtctgggact gacgactctg actgaaactc caaataattt tgtcaagttt 240  
 cagtcgtctc atgtgtttac ttttctttgt tttgcgtgag atcgcagttt ctgcgggagt 300  
 ctgacccggt gggagagact tcagcttctc tttacaggaa tactttgcca acttgttggt 360  
 atttgttttg cttgaaagta aatataaatt gcatttgttt ggaaaacaac atctacgttc 420  
 ac 422

<210> 2115  
 <211> 390  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-043-Q1-E1-A1  
 <400> 2115

gcgtccaccc acgcgtccgc acgatagcgc cgacgacaag acggattata gaaagatagt 60

gctctccagt gtttggtttt gtgatggggc gtctcagtgg cagccataaa atanagtaat 120  
aatttggtta ttcggcctaa atacagaatg agtaggaata gttggaggta ccaaatcgta 180  
tcctgagtaa atcttttctc cacttgagaa gatgtcctgg aattatagaa acactagctc 240  
acctctatatt cgggttcgtc tgaattgcgc aactttaaac aaatatactt ctttagctgt 300  
cttacagtga tatccgggtg gcactcttaa gaacggtttt tgtagggacg gcagattaga 360  
gccctggatt ggtgaaagct gtaacaaaca 390

<210> 2116  
<211> 76  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-043-Q1-E1-A11

<400> 2116

gaaacagccc tcatcacct agacatttcc actgggctcg catagggata ataaagatag 60  
gttgaaaatt ttttgt 76

<210> 2117  
<211> 209  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-043-Q1-E1-A2

<400> 2117

cgcgccaac tatatgacgc aggcatacaa gtgacgcagt agatcagaga gtcacacatg 60  
caagtacgta aagcgaacgg gtgagtaaag aggtgtgaaa gagtggaaga acatgaaagc 120  
acagaagaat gtcacacatg gttagagtag ggcccatggc ggaagtaaaa ccggaaatct 180  
cacaggacga aacccccatt ggaactgag 209

<210> 2118  
<211> 72  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-043-Q1-E1-A3

<400> 2118

ggtcagcgag gtgaagtgag tagagaaata acaaggatac ttgtgctaga aaataaaggg 60  
gtcttttctt gt 72

<210> 2119  
<211> 305  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-043-Q1-E1-A5  
  
<400> 2119

cccacgcgtc gaccggatgc attgctcagc gatgtgaagt aaacgagtgg tttgtgaaaa 60  
tacaacgaat aagagaaggt cgggaagctt tcaagtcatt tgcccagtga cacgtttctc 120  
gtggttagag tgtgtccttt gaaaatttga ggaaaaggac atagttttgg ttcctagcgg 180  
taagcagtagc ttgttctaga aattttgtaa gtttatactt tggctattct tttatagaca 240  
cgcttaggca agcttgtatg tgggacactg cttggaaagg catttggaag acttaggatt 300  
gcctc 305

<210> 2120  
<211> 392  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> unsure at all n locations  
<223> Clone ID: LIB190-043-Q1-E1-A7  
  
<400> 2120

accacgaac gaagctttta acaaggagaa atttgaggtt aatagcacat tcaaggaaga 60  
actatacact accaaacttg atcgttcggc tcccgatttt gatgaaaagt tgcgaaaggc 120  
cgaggaaata gcacagcaaa ttcgaagagc ggaaaccacg aatatccact tgaaggaaga 180  
aagaggacag gaattggaaa gagattatga tgaggaatta gtatatggtg cagtggttcg 240  
tgaaagtgac gctggagaat tgaatcaaaa gtatgacaat caaaaacccg atggaggctc 300  
ttccttgctg gtgttganac aagaagggtc gaatggaagt gcagctgttt ctgtagacct 360  
tatccccgctc tccgattttc gacaacggac ca 392

<210> 2121  
<211> 394

<212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-043-Q1-E1-A9  
 <400> 2121  
 aatgtaaagt atagagtgtg cggcctgcc aatagtatag aagaaatcga tgaaagtgat 60  
 cgccaataca agatgcggat ccatcgagca attctgagga taatggtgaa gtcaaacaag 120  
 aaaatgatga acttaattca caagcaactg gagaagaaga tgcagaggat atggaagaac 180  
 cttggaccta tttgttggag caaattgcgg aggcagaaag gatagagttg cactgtgggt 240  
 ggtccaagga ggatcgacaa aaccttcttg ttgcgttgaa agagacaaaa caattagatg 300  
 caacagtcct ttcgcaacat gtgaaaagca aaagccctga ggaaataacc gaatatctaa 360  
 aagtattaaa ggacagactt gggaagaaag atga 394

<210> 2122  
 <211> 405  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-043-Q1-E1-B11  
 <400> 2122  
 acgcgtccgg acaatgtgaa actttccact ttattggatc tctttgcaga gtatgccaaag 60  
 ttggataact tgttttctct atgtgaacaa aagtttttgg aaatgcgtcg aattgcacgc 120  
 ctgttacaac aagcgggtac tttatcgttg agagaacaat ttgagttttg ccaagctcct 180  
 gtaaaaattt cggatccatt tcttatgaaa tacttggttaa ggtaaataag aggctttggg 240  
 acattttctt ggaatcgata actcgtgtag ttttgcaaag aatgttgctg caggcgttcg 300  
 ttcggaactc accatccgtc cgtatcgtgg caaattactg acacaacttg atttacacaa 360  
 gttggaaagt cgatatcgag tatttgattt gtatagctac ttgag 405

<210> 2123  
 <211> 355  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-043-Q1-E1-B12  
 <400> 2123



aagaacaaga actgagttga cgatataaaa ggaagaacgg accgagtttt acaagtcgat 60  
attgctggag tattcttctc tgccgttttt tcaggagttt tgatgattcc tgcctttttt 120  
gcgttcaata tgtaattcc aatagagcat ttgaggaacg gaagtactta ttttttcatt 180  
gcggtagtaa ttctttgttt cgtagctatt gctgttctgg ccattctgta tgtaagggtg 240  
cttaaaggaa atgaaagaat gcgacttgag ttgctgttgg gcaaggagaa gacagcaaca 300  
ataacaggaa cagtgaatag ttagaaagggt tgatgttcgt agatattcac tactt 355

<210> 2124  
<211> 246  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-043-Q1-E1-B3  
<400> 2124

acatcaaatg ctcaaacgga ggaaagaaag attcttcaaa gaaagaagcc acaagtaaac 60  
ctgcagcagc agatgctaca aagacgacag aaaagtctgg tccggaagcc aagttgaagg 120  
gaactggtgc aaagaaacaa taaaaagttg actatgcatg ttctgttat gttttgtgag 180  
ttctgtttga tagtttccag ctattctttt ggtagtgaat aaagagaaaa ttttttagat 240  
ttacac 246

<210> 2125  
<211> 294  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-043-Q1-E1-B5  
<400> 2125

cccacgaacc aagggggcga gttgctcgt ataaggcctc cataactccc ttatggctct 60  
caaaatagtt ttatgcgaaa gtctctcatc tatttgcaag tatctatgat tggacaagct 120  
cttatcttct gtactcgtgc atactggatg ttctttatgg atcgtcctgg tagcttattg 180  
atgggtgcat tttgtactgc acagactctt gctagtttct tatcggttta tgccaagtgg 240  
ggctttacag gtattgacgg agttgggtgg ggggtgggctg caactgcctg ggta 294

<210> 2126  
 <211> 381  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-043-Q1-E1-B6

<400> 2126

gaccacgcg accagcttct cctagtagcg aagaagtttt actgtctgta ttccagtttt 60  
 tagaaaaagt aacagaatat cccagcagtg acccacataa agctttggca ctggtgtac 120  
 acggtatttt gttaactcac gggttttcgtc cttcagaaga agaaccacct gaaaacgtgg 180  
 ataactgggc ctttgcagtt gaaaatgcga agatacccaa caactttgag gaaaataagt 240  
 atggagggag ttatagacac tacagaagtt gtatgacgtt tgaaattcga atggtagctc 300  
 tgagcaagtt tgtgggtgtc aacgcagtag ccagtgatat ggacaaagta ttttattcgg 360  
 agctcagact gggaaaaatat t 381

<210> 2127  
 <211> 94  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-043-Q1-E1-B7

<400> 2127

gtccgttgtc gactcaaacc gcattatgtc ctctcatctc gttgtggcgt tcctaagggt 60  
 actgtctgat tggattggac tgcaccgcgg gcga 94

<210> 2128  
 <211> 397  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-043-Q1-E1-B9

<400> 2128

agaatagtag gcggtgatgg attggaagag acaagctggg tgaagtagcg agacaagaga 60  
 agggaaagtaa aaggtaagaa agaggaaagg ttacgagag aaggagtag aaagaagaga 120  
 gtgtaaggcg gcgtcataat agaaatccga aaggagtaga agaaaagaga gagaagaaag 180  
 aaaagaagag aaaagccgta ctgaagaccg acacaggtac tcgaggagaa aggagaccca 240

aattaaggtg agagaatgga cgataaggaa ctaggcaaaa ggatatggta tctgcggtag 300  
 aacatatgaa agaagcagca ccgactgttt agcaaaaaca cgtgccagca gcagcggtaa 360  
 aacgtgtgta gcaagcgtag agcacaagaa ctgggtg 397

<210> 2129  
 <211> 265  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-043-Q1-E1-C1  
 <400> 2129

cgcacgcgac cgatcgtagc cgtggcatgc attccacttg ccgatgggtc attgcgctag 60  
 cttctgtcgg gttattcttc cagtttattt ctcttatatt ccatctcatc tctcaattgg 120  
 caaagatacc gtttgattgg gctgtggaag cagttgtaaa ctttttcatg atgtgggtgg 180  
 ggtttgctgg tgctttgagt gtgatgatat cgaagcctac tgcccacttt cagcggggat 240  
 atgattttgg tttggaagtt agtac 265

<210> 2130  
 <211> 381  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-043-Q1-E1-C3  
 <400> 2130

cagagatctc tagagaaagg caagaaagaa aagaaaggaa gacacagtaa atgaggcgag 60  
 aaagcatagg aagtgaaacg gattaggaac ccgtgtagtc tatgcagtaa aagaaagaat 120  
 gagtaagaaa aaagggagtc attccaccag gggagtaaag ggcgaagaaa gaaacccaaa 180  
 gcaattgacg ggaatcggaa aaaggggtgg atcacgtaaa ttaatccgat aaaccgagaa 240  
 ccttacctct ccaagaaggt gttgcacggc tgtcgaaaga acgtgctgtg aagtgagaga 300  
 acgtacgaga aagccaagtg aggaaaagaa ggcaagtaga gggcggcccg agaaaagaag 360  
 ggcgtaagac gtgatacaga g 381

<210> 2131  
 <211> 183

<212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-043-Q1-E1-C4  
 <400> 2131  
 cgcggtccaac caacgacct gtcaatcttg ctggtatggt cgctgcaaact actttacgtg 60  
 gtgatgttca acagacgcac gggcttgagc atgaagagtg gttaaactgt acggagacgg 120  
 gcgggggttca agatgagaaa tgtagtttag gcgatgtggg aaatcctgag gaagtaccgt 180  
 ccg 183

<210> 2132  
 <211> 358  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-043-Q1-E1-C5  
 <400> 2132  
 cacgcgtccg cccacgcgtc cgccacgcg tccgagacgt caaaatttcc catcgcatg 60  
 tgaccaactc ggcgtcgtcg tagtacattc ctttgggcat acttgtaaa ccatgaagta 120  
 cttggcagct tatttttttg ctaaaatggg aagcaaaca ggcaaaccta ctgcagatga 180  
 tgtgaagaaa atattgactt ccgtaggtat cgaagtagat gaaggtcgtc tcacgcaagt 240  
 cgtggaagct ttgaacggaa aagatttgaa cgagttgatc gaacaagggt tacagaaaat 300  
 gtctacggtg ccttccggtg ccactgcagc tggtgcagca gcagttggtg gagcagct 358

<210> 2133  
 <211> 376  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-043-Q1-E1-C7  
 <400> 2133  
 cagtttggag ataggttacg tgtcatggat gcccttgcag ataactttgt ggaagaaatg 60  
 gaagcttggg ttggagaaaa gcaacctttt gatgttatcg ttgccaactt agttcttcat 120  
 atttaccag gaaacaatga aaaatttggt caacatgtgt ctctctctt acgcccgtgt 180  
 ggtgcatttt tgggccaac ttttgcagcg gaggattctt ttgaagaagc atatgagttt 240

ggaattcaac gcagagcagt gatgcatagt ccagtgtcca ttgcatccat gttggctcgc 300  
cataatatcc atcccgttca tgtggataca aagagcagat taatagacga cgaagatttc 360  
aagtggatcg aaacag 376

<210> 2134  
<211> 389  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-043-Q1-E1-C8  
  
<400> 2134

cccacgcaac caggcggatg tttattatgt ggaaccgatg aaaagaaaag agtaagtttt 60  
ggggattggt gccaacgata tagctcaatt tggtaattat gaggaatgaa acggcagcgg 120  
agtttgcgaa aagagtgaag caagcaatcg tgcgtcgaat aggcttgata gatgtggagt 180  
gggatggatt cttgaagaga catcgaatgt cctcaaagtt tattcaacaa agacaaaagg 240  
cacatgcaat gggtttcttg cgtcgaatgc agcgaaatgc agaacattcg caggaaagag 300  
gttttgactc ttccgtagac ttgagttcgc tatccacagc ctcttctcca gccatcgtaa 360  
gaaagaggaa agccaaccac acgaaaggg 389

<210> 2135  
<211> 406  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-043-Q1-E1-C9  
  
<400> 2135

cgtccaatgg aatgtttgga atgcaccaag ttatgagcaa ccaagtttgt gaagcaagtg 60  
tggagttgaa atatttagag gcagtagaga atgtacagga aatatacaaa aatattccag 120  
agagtgatct attggagttg tatggtctat ataaaagaat aaaggatgga gaagctcctt 180  
tacagaatcc tttctatttc tatcaatgga aagaaactgc caagtggaag agttggaagg 240  
aggcaagtaa taagtattca aaagaggaag ctatgaagaa atatattgca ctgagtgaaa 300  
aatatcacia gaaagattcc aatacaagtt atactgggaa acagccttta gggttcgagt 360  
tgctaacag tgaagaagag caatcccaga aacctgtttt ggacct 406

<210> 2136  
 <211> 234  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-043-Q1-E1-D1

<400> 2136

ttttcggata agtagctgtg gtcacagtgg acgacgtcgt ttgtgttttg cttgtcattg 60  
 ttgtccagtg gttccatggc gtttcacttg ttacgagtga agcgtaaagg tcgtttcttg 120  
 aactgcactt gaagccaagg cgagtttaat tgacgggagt tggaaaccac gttgttgcaa 180  
 aattcttttc aggtgggtat ttagcatagt ttgactacgg tgtgaaggca gttg 234

<210> 2137  
 <211> 378  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-043-Q1-E1-D10

<400> 2137

tccgcggttt ttgagaggtg gcgggcatgg cgcagtataa tatgtgatgg ctttggcttc 60  
 tatcagcttg attttagttt tctttctttg gttggcctcc tttgtcgacg cattgtatcc 120  
 aattcttaca aagttctggt ttgtggagct tggatcaac atattcctta ctatgtgggtg 180  
 gttggttggt gcaattgtgg tgactgcaaa gcgaccttct agtgttgtta tggatgcgct 240  
 tcacataacc aaagatatca attcaatcga tggcctttca tggatcaact ttgcttttac 300  
 gctattcctt tgtggagtag cagcagttga cggattgttg gtgggagata agaccagcag 360  
 ctccggcaaa cagaatac 378

<210> 2138  
 <211> 386  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-043-Q1-E1-D2

<400> 2138

cgcggtccgac agaagagcgc gatgtacaac aagcagcagc atctggatcc acacgatgat 60  
 acaagtgcac aaagaccaga ctttatgccg tatcaaaata atggagggac agtagtagct 120  
 atgggagggg aagactattg tatcgctcgcg gcaacgactc gtctagggtt gggtttcgct 180  
 attcctacga gaaacgtttg tcgatatgcc atcttaaacy accgcgtact gttggcaact 240  
 gctggaatgt atgcagacac cgttgccttg cacaaatttg taacagctcg agtcaaagt 300  
 taacaacaac accaaganaa accttttggg ttattctccg ctgcacantt tgtatccact 360  
 actttgtatt tcaggagatt ctttcc 386

<210> 2139  
 <211> 322  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-043-Q1-E1-D3  
 <400> 2139

ttcgtcgacc gacgcatgca acgtactata cgaagaagat ttgaaagacg tatttatatt 60  
 cctctaccaa atgttcaagc acgagaacga atgtttcagt tgcattgtggg aaatacaccg 120  
 catgagttga aacctgaaga tttccacgaa ttggctcttt taacggaagg atattcgggg 180  
 tccgatattg ctatttttagt tcgtgatgca attatgcagc ctgtacgtac ctgtcagaat 240  
 gctcaagcgt ttaagaaagt gaagaagccg aagagtgcga cggacaaagc attaacgata 300  
 ttctatacac cctgtagtcc ag 322

<210> 2140  
 <211> 284  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-043-Q1-E1-D4  
 <400> 2140

cgcggtccaag gacgcgtggg tgaagaccac aaaggaagca tctccggccg tctttctttc 60  
 tttcgtttca catgtagggg tttctgtttg caagattaaa ctgtcgtgta gtcgctcagt 120  
 gagcgtgttg cttgtttcta agaattgggt gagacttggg aggcgttcaa gagccaaagg 180  
 atatgaccgc attgtatccg cggcattgga ctctttttcc ctgccagcgc ctgaacatct 240

gaatggagct gagaactaca agtatgggga tcagcgtaac ttga

284

<210> 2141  
<211> 370  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-043-Q1-E1-D6  
  
<400> 2141

accacgcga ccaccacgc gtccgcccac gcgtccgccc acgcgtctga agtaatgccg 60  
acgcagtccc aactacgttc cttaggtcga ctatatttgt ggagaggcat cgctcagcat 120  
ggaggtycta ctgcggtagc caaaagggtg ggatggaaag tgatrttgaa accttacaaa 180  
ttttggaaat cttttgagca tttggaacgc gaactgattg cattttattga gcattctcac 240  
ttacctcgag tcatgccgac gcaggagaca ttgcgataag ctggtcgtta ggatattatt 300  
catgccattt acgttcatgg acgctcggat gaagttgcaa ggcattttta tttgccttac 360  
aatccgactc 370

<210> 2142  
<211> 384  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-043-Q1-E1-D7  
  
<400> 2142

gagaaaggca agaaagaaaa gaaaggaaga cacagtaa at gaggcgagaa agcataggaa 60  
gtgaaacgga ttaggaaccc gtgtagtcta tgcagtaaaa gaaagaatga gtaagaaaaa 120  
agggagtc at tccaccaggg gagtaaaggc gcaagaaaga aacccaaagc aattgacggg 180  
aatcggaaaa aggggtggat cacgtaaatt aatccgatgt aaaccgagaa ccttacctct 240  
ccaagaaggt gttgcacggc tgtcgaaaga acgtgctgtg aagtgagaga acgtacgaga 300  
aagccaagtg aggaaaagaa gggaagtaga gggcgccccg agaaaagaga aggcgtaaga 360  
cgtgatacag agtaggaaga aaag 384

<210> 2143  
<211> 387  
<212> DNA



<213> Cyanidium caldarium

<223> Clone ID: LIB190-043-Q1-E1-D9

<400> 2143

caattcgtat tgcacagtgg aattggatat cgacggctat tatggataac aaaataggaa 60  
agcgtggagg tactttgaaa gacgtttcag caccagactt cattgcaagt tacgcaaact 120  
ttttaaaacg caccggaaac gtggaactgc catcatgggt ggattatgtg aagaccagta 180  
cgaggaacga actagctcca tatgatccag actggttcta cgtgagaatg gcagctctcg 240  
ctcgtcaa at ctatattcgt ccaggtagag gtgttggtgc attccgacgg gtatacgggtg 300  
gtcgaaagag aagyygatcg aagcctagtc acttcgcggt ggcttccagt tcagtcatcc 360  
gacatgcact tagacaactc gaaaagt 387

<210> 2144

<211> 85

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-043-Q1-E1-E1

<400> 2144

accacgcga tcaaacaatca gcgcacgcgt ttgccacgc gtccgggaat gggttgcgca 60  
ttctccacgc agctgcaggg gccta 85

<210> 2145

<211> 423

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-043-Q1-E1-E11

<400> 2145

acccaacgtc caccacgcgt ccgcggacgc gtgggagcga attgaagaaa actttgcttg 60  
tgactttgtg ctgaaacctg aaatgatgca gcaacttgcg aaattggata aacagcaagt 120  
cgtttgtgat accaaagaat attggaattt ggctgtgaat tcctagtttt tgttcctaaa 180  
aaataaaaaac taaaatgtgt cgtttacatc gttaaaaaaa aaaaaaacia aaaaagaaca 240  
aaaaaaaaa aaaaaaaat acaaaaaaat aagaaaaaaa aaaaaaaaaa gaagaaaaac 300

acaaaagatt aaaaaatatt ttttaaaaaa ggggggcccc cccaaagggg tcaaattcta 360  
 tttagctttc aatcaaagtt caaacctctc caaggggggc cccaaattca attcaagggg 420  
 ccg 423

<210> 2146  
 <211> 407  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-043-Q1-E1-E12  
 <400> 2146

attggntccc cacaaactct gtcggttggt gaatagtttg gttcgaatat ttatcggtga 60  
 agaaaagtgc gaaaagatgg aaacaaaaga gagcttgagg gaaaaatttt gcagaatatg 120  
 tcacgataca gatacctaag agcttattcg accttggtgac tgcacaggta cgttggcata 180  
 tggtcacaga gagggtctcc agaggtggct gcagcaagtg tccgactaca agtgtgagat 240  
 atgtggcaag cagtaccgtt gtaaaaagaa aactcgctcc tttttgagtt tcctctttcg 300  
 taaaggagct tggcgagaat ggctgcactt ggggtacgtc accttttttg tcaatcgaat 360  
 ttggagccaa actggagttc tgttgcaaata tctgaaacta agacaac 407

<210> 2147  
 <211> 127  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-043-Q1-E1-E2  
 <400> 2147

cgcgccaac caaccgtccg ggcggtgctt tccggaatgc ttaggtttgc actagcctat 60  
 actttttcttg cccccctgt ggggtacacgc aggtatgat tgggcgcctt cgctgtgttg 120  
 tttgtgg 127

<210> 2148  
 <211> 375  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-043-Q1-E1-E3

<400> 2148

cgcggtccaat gaattcttcg tgggtttgcg tctcaagatg tcttttttga aacgtataca 60  
gtcgactctg ctttccaaca gaaactcagt aacaaagaca agtaaggcca attacgacat 120  
aaagcacgtt cgggtttacc gctgggaccc tgaaaaggga gaagaaccta aattgggttac 180  
ctactcgatt cctctcaaag aatgcggtcc tatggtgttg gatgccttat tcaaaataaa 240  
caatgaagtg gacgctactt ttgtatttag aaggctgtgc cgagagggaa tttgtggaag 300  
ttgtgcgatg aatatagatg gaaaaaaccc tcgggcttgg ttaactccgt tagcaggacc 360  
gaagcagaca gtgac 375

<210> 2149

<211> 198

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-043-Q1-E1-E4

<400> 2149

tgaggcaag tggagcacag actttttcag acatttgagg gttatgcctc ctctcctcc 60  
tcctccgcaa tcttctatat cgacgaccat tactggaaaa gctatttgta gttatgtttc 120  
tgcgctatta gaagaaggag atcggtatt gaatgctatt ggaaagcata cagttcctag 180  
tggtattttt acacagga 198

<210> 2150

<211> 375

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-043-Q1-E1-E7

<400> 2150

cacgcgtccg caaaagatca agcagcaaca atgtactatg acagtctctg aacaatacat 60  
acagcccgat acttgctaca agtatgtccc tgaacaacaa ttggtgcctc atacttgta 120  
caagtattat tctgtaccca agtttattga aaagtgtat cctcagtatg caacaacgga 180  
gaaatgtgta gagtatgagt aggttcata tgccacttct acacottatc catcggtatc 240  
tccaagttat actccttcag catatcaaac aacttctgct tattaagag ccgaagactg 300

gatagatddd tgaagtgtct cgtgttcaaa ggaaccatga gacataagaa aaagtaaacg 360  
 atttggtddd atgta 375

<210> 2151  
 <211> 373  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-043-Q1-E1-F1  
 <400> 2151

cccacgcaaa caagcgtccg cccacgcctc cggatgacga ccgttcatgc aactactgcc 60  
 acccaaaaga cagtagatgg accttctcac aaggattgga gaggaggaag aggaatddd 120  
 aataacatta ttccatcttc tactggagca gccaaaggctg ttggtaaagt tattcctgaa 180  
 ctgaatggca agttgacggg tatggcttcc cgtgttcctt gtccggatgt ttctgtcgtc 240  
 gatgtcactt ttcgtttaaa gacaccaacc acttatgacg atatcaaggc aacgatgaaa 300  
 gctgcgtcag aaagcaaagc tttaaaggga atattggcat ataccgaaga tatggtagtt 360  
 tctactgact ttg 373

<210> 2152  
 <211> 427  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-043-Q1-E1-F12  
 <400> 2152

ctcaccccat ctagtagaag aatatgttgg cgtttacttg tctcacagac tgtcgttgg 60  
 tagagacttc tcgattctcc agatgtgcc aagccaatac cgtctcgttg cgacgtagtt 120  
 cccagtgttc acactcttgg aggagtgttt cgatgaacta cagtccttat tcgataacta 180  
 ccgacaaatc agaaggacat attgttcccg gtactttttc aagatttgag tttcttgaag 240  
 gtcgagtcac cgggtccaacc gtcttgaacc ctagcatact tgactttaca gtgtctaattg 300  
 tttcagatgc tgcctttgga gaatggagag cattatcggc ttcaagtaga gcanaagaac 360  
 tggaacacag aagaaacgtt cacaagcga caatagaaag tctcaagaag actcctaccg 420

aaaagtc

427

<210> 2153  
<211> 223  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-043-Q1-E1-F2  
  
<400> 2153

gtccgcccac gcgcccgaa agaggcaa acgggaaagc agtaaaagaa gaaagagaaa 60  
ggaaaaaact gagtatcagg aagaaaagag ggagtagatg aggaaagaaa gatcaaggaa 120  
gtaagagtaa gagaaggagt aatgtgaatg aaagcaggaa agtatttgaa gaaaagagtg 180  
taaagcgcgt accttttgca taatgtcgca gcgagtgaag gag 223

<210> 2154  
<211> 365  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-043-Q1-E1-F4  
  
<400> 2154

gcgtccgacc aagcgccga tcttctcggt ggatgctacc tctattagaa catttgcgaa 60  
cgtcttattt caagttgaat ccatctatgc catccacttt tcatgttgga gagactcttc 120  
agaagccaca attgtgtcag attgcacaag ctttggttaac agaagcggat aaaattctgt 180  
attctgttta tcgtcatgta ccagattcag gtatgttgac ggaagaaatc aacaggtata 240  
cgggattcga acaaggagca gaaaacctta catggagtta tgactcggtt gttactgcag 300  
tctggagcag gaattattcc ttgaacactt ttcgtagtaa ttgggttttg gggtagtttt 360  
ttttg 365

<210> 2155  
<211> 303  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-043-Q1-E1-F5  
  
<400> 2155

gcggacgagt gggagcggat tgacataata ttagcctgcg acattgtgcc gtttccatgg 60  
gatgtggcaa cagcatcata cattcggata tcatcatctc gtatagtgat gcgacaacca 120  
ctggaaattht cgctgtttcc tcttaattht tctgcgaaag actattcact actgtgtgtc 180  
gaatacatat ttccaaatat tacgaggaga aaagttggtt cgagcatctt tgtcatggat 240  
agaaactcta aaataagcac caagacactg aagaggcatc ttccggatac acgagacttg 300  
ggc 303

<210> 2156  
<211> 300  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-043-Q1-E1-F6

<400> 2156

agaggaggag gcagaggaaa tagtcgagga ggcagtcgcg gtggtagtht tcgaggthca 60  
atgaatgata atagacagga aagagatgct tcacaaggtht tcgccaactc tgccaagcgt 120  
ggtgggagag accggacagg tgataaaagt gcgactacga gaagagtgaac ggaaactagt 180  
agaggaagag gaagtgaag agcaggagct ccattccgtg gaaacaacgg accgaatgag 240  
cgccctccaa gagaaaggaa tattgggaga aacgacagga aacctthtct tagaaatgat 300

<210> 2157  
<211> 395  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-043-Q1-E1-F7

<400> 2157

accacgcga ccaccacgc gtccgggtgt ttgttggtgc tgtagtctt cagtgggtgag 60  
cggatatgtc tctgacagac atcctgtatt gggtggaacc agtagthtgg agcaaacgct 120  
ttgaccttcc actatctgtt acttgcttct ttatatattht catagtattht catatagctt 180  
gtgccttctt tgggtattgct gactattgga agcttctgcg caagtacaag ctgcacgaaa 240  
gtgacgagaa gacctacctg cagttgctgc caagagthgt gthcaatcaa ctggcgthttht 300  
acttgactag ttgctacata ggagagaaaa tgggttggtat attcagaacc ccttctaaag 360

acaatgcttt ccaactctgg aagttgccta tctat

395

<210> 2158  
<211> 296  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-043-Q1-E1-F8  
  
<400> 2158

accttttcag ttattgcaag attccgccag cagtgaatca gattgaaatg catccgtatt 60  
atgcaagaac agatctgctc gaattttgta agagtcgtgg agttcatgtg actgcttatt 120  
ctcctcttgg gagcggtaaa catgggccgc ttcaagatga gacagttgca aagattgcca 180  
agaaacatgg aaggacacct gctcaggtat tgatccgatg gtgtctagaa cgtgggtgtg 240  
ccgttagtcc aaagagcgta aagaaagaac gtatcagga aaactttgga gtttta 296

<210> 2159  
<211> 371  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> unsure at all n locations  
<223> Clone ID: LIB190-043-Q1-E1-G1  
  
<400> 2159

cacgcgtcca accagcgtcc gtgatgatgc gccgagtaga gacgtgactt ggttggttca 60  
gatcgtttgg aacaatagaa tctttagaaa tttttggctt ttttggtggt ttatgtgctg 120  
ttttgtgact aaagtgtctg tactgaatat ctgctgttga catgaagttt gggaaaaagt 180  
tacaagacgc agtggaagct gcanacaagg attggaagcc gtactttata gactacaacg 240  
gtttaaaaaac gttaattgct acgagtgtgg tggagtacaa agacaaggaa ttcagtgggtg 300  
gtgtggtgga ggaagacaaa gaggaggaga gtacgaaaga ggagcagacg gcggtgaatg 360  
gagaaaatat c 371

<210> 2160  
<211> 288  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-043-Q1-E1-G10

<400> 2160

ttgcagtagc gtggatcata gcggtagggt gttcacattt gacagtttaa cactgtaaat 60  
atcgcatgaa tgttcatttg tacatcagta acactttctt agaaagagat caaagggttag 120  
cagggtgacgt cactgcggat atcgccacag acatgtgtgc tctttagata tctgagtgc 180  
tttagcgtcg caattgtgtt ccgtgtgagt catggtaatc acagtacctc atcagtatgg 240  
ctgtcaatgc gtccgctata gatctcactg caatgctagc ggtaaaac 288

<210> 2161

<211> 325

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-043-Q1-E1-G2

<400> 2161

cccacgaatc aaatgcagca atttcggcta attgttgtgg aacaagataa catgtcgacc 60  
caaaacgcag taggtctctg caacttgaga aggagaaata cggcttcacg cagttccggt 120  
ttaactagtt ctggtacgag cacctcgagg aattattttt ccgcgcgact gtatagcgac 180  
gaagcacccg gtttgagagt gggaccaacg tctgttatgg tttttagctt tgtctttata 240  
ccttttgttg tagttttgca tgtgtgggtcc aagtttcgag gttgattagg gaataatagt 300  
gaaattaaaa gtacgacaaa catgt 325

<210> 2162

<211> 262

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-043-Q1-E1-G3

<400> 2162

cgcgccaag tgatttggtt gtcattacgc tccacgcagt gtgagttgtc gttgcgcagt 60  
gtttgaaagt tatagtatta cttattgttc ttggttgga cactactgat ggacgcagaa 120  
tcgagagaga aatctgttta cctttccaag ttggcagaac aagcggaaag atatgatgaa 180  
atggtacaag aaatgaggaa agttgcctcc caaacgcagc aaaacaccac ggagctttca 240  
gttgaagaga gaaacctttt gt 262



<210> 2163  
 <211> 214  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-043-Q1-E1-G4

<400> 2163  
  
 cccacgcaat ctacggtacc cgctgtactt aggcatatca ttctgcgng gacaagaaac 60  
 caactggaat tcccctagta cgggcgagcg aagcgggaag agcccactat gagaatcctc 120  
 tttttctacg gtgagaagag gagatgtgtt taggcaggac aagaaatata tgccggcagca 180  
 aaggagcaca tttcctggaa tggaatatca tgga 214

<210> 2164  
 <211> 356  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-043-Q1-E1-G6

<400> 2164  
  
 tccaggcgtc gtcgattttt ggttgttatt ctctccttg acctatccta cacaatgaaa 60  
 ggttggtctc atcagtatag tattgttgga agaaagatac caacggaaga ggaacctgaa 120  
 cccccaacgt atcgtctaaa gattttcgcg ccaaatcaag tcaacgcaa gtcccgtttt 180  
 tggactttc tacgtaaact taaacgagtg aagaaatcgt ctggcgaaat tctgaacatc 240  
 agcgaagtgt ttgaaaggaa accgactcaa gtaaagaact atggaatttg gataagatac 300  
 aagtcgaggt cggacactat cagtaggtat agggagtata gggacgtgac aattac 356

<210> 2165  
 <211> 281  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-043-Q1-E1-G7

<400> 2165  
  
 cccacgcgac catgtgtgtg taacaactat cagcaccaca aaaagatggt tcgtatgagt 60

gtattagccg atgctttgaa atccatcgcc aatgcagaaa gaagaggaaa gcgtaagtt 120  
ctcatccgcc cgagctccaa agtcatcata cgcttcttgc aggttatgca aaaacacgga 180  
tatattggag agtttgaata tgtggacgat catcgctcgg gcaaactcgt cgttcacttg 240  
ataggcagat tgaacaagtg ccgtgtgata tcaccacgat a 281

<210> 2166  
<211> 373  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-043-Q1-E1-G8  
  
<400> 2166

gacgcgtggg atcgactgaa acgagatatg tttacgacgc gtcggaatac ttggcccttg 60  
agagatatgt ttggtcgact cattacgttg cctgaagtaa cgagcaatac caaatgtac 120  
ctacgagact gttttgatca catcatacaa attatcgata ttttgggaagt atatcgggat 180  
agttcgatgg gtctcattga tatttatttg agtgggtgcaa acaacagaat gcaagaagtg 240  
atgaaaacat tgacgattat cagcacgata tttattccgt tgacatttat aaccggtgta 300  
tatggaatga actttagttt tatgcccagag ttggagtatg actatggata tttctttttt 360  
tgggtattgg tga 373

<210> 2167  
<211> 446  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-043-Q1-E1-G9  
  
<400> 2167

ccggtcgacc caaacgtcca acaaaaagt atgctagaac gaaaaaatct ggatagctta 60  
tggacaaacg caaagggaag gttacaaaag cagaagtgtc cgcagtagca gatgttgaca 120  
tgaacgaaca aaatggcctt tatttcaatt tataacaact tgtttgcaag tagagcagta 180  
tttcgtccac aacaagcaac agtttgtact ttaactcaag agggatatcc gaaaataatc 240  
atagctacag tacaataaag caagactcct atgacatctg tagcgggttg cagcaatgga 300  
ctagcacaat atgcaggatc agtaccacat tggttctaata acaaagggtac aactgctcca 360

gctaccatgg aaaaaatcac tattaataaaa agagcactgg atacagttaa cgcagctttg 420  
atgttaattg gcacataaac taaaac 446

<210> 2168  
<211> 365  
<212> DNA  
<213> Cyanidium caldarium

<223> unsure at all n locations  
<223> Clone ID: LIB190-043-Q1-E1-H1

<400> 2168

aaccaagcgt ccgcatttct tcttcttggt gttgttggt gaatttgtag tagtagacca 60  
caaagatgaa cgggtgtagta tcttcaggga atatggtgta taacacgctt ggaaaaagcg 120  
gcttattagt atctaaacta tcttttggct cctgngtcac ttttaacgaa caagtggacg 180  
tcgaactggc ttacagcttg atgaaaagag catatgaact gggttgcaat ttatttgata 240  
acgctgaaac ttatgcagct ggagcagcag agtctatcat gggggaggct tttcatcgag 300  
gtgtaaanga gggcgtatgg acaagagaag acttggtgtt tactacgaga atattcttcg 360  
gcgga 365

<210> 2169  
<211> 373  
<212> DNA  
<213> Cyanidium caldarium

<223> unsure at all n locations  
<223> Clone ID: LIB190-043-Q1-E1-H10

<400> 2169

acccaaacta tgagtgccaa gtggcatcga tcttcattgg atcgtggctt ggatcgtttt 60  
ccagtgcttg gttggctatc ttgtcttggt gatagattga ctagtacagt ctttctattg 120  
aatgagacgg tgctaaattc cccatccgtg taaatattac ttcttatgac ggaggagata 180  
aaggattgct tcaaagaggc atctacatct acatcaagga acgagaacta tggtagtgaa 240  
tatgagtatg ctagagaaaag gaatacanag aaaagaacat tgcctttcga ttccaaattc 300  
anactaaaga gaattgcact aaatgacata acgaatatat ctcatctccc ttcagagttc 360  
atttcaagtg atg 373

<210> 2170  
 <211> 281  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-043-Q1-E1-H2

<400> 2170

cgcgctccggc aaggggaatat cacaacttta ggcagaggtg gtagtgattt gacagctgct 60  
 gcgataggag ctgcttttagg ttgtagtgaa gttcaagttt ggaaagactt ggatggaata 120  
 ttatctacgg atcctcaaat tgtgtctggt gcagttccaa ttccctttgt gacctttcaa 180  
 aaaccctttg aaagggcata tttgggaccc aaggttcttc accccattgc aatgcaacct 240  
 gcaatgagat acaacgttcc tattcgagta aagaattctt a 281

<210> 2171  
 <211> 101  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-043-Q1-E1-H3

<400> 2171

aaccaagcgt ccgggcagtc atcagaatta tggactcaga tttgcgatcc gagtggctcc 60  
 ctgcttagtt cggacatgtc catggcttac tatatagtcc a 101

<210> 2172  
 <211> 376  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-043-Q1-E1-H6

<400> 2172

tttgtagaag cgttggctgt tgcataaaga gctatgtcgg aagagtcaga caacgaaggc 60  
 gtggagatca agttagagac tgcacctcat gatcctcgct tccaaactac taaccaagcc 120  
 aagcactggt ggtcgagata catcgagtat cacgcttggt tgaaacaaaa aggtgaagag 180  
 gacagcgagt gtcaaaagtt taaccgatgg tacaagtcac tgtgtcctat ggaatgggta 240  
 gaaaactggg acgaacagcg tgccaacggt acctttcctg gtcccgtgta gttgtactgt 300

tccacttggg cccttttggg gtttaactga cctgttgccc gtattgtcct tatggctttt 360  
 tttgttcaat aaagtt 376

<210> 2173  
 <211> 206  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-043-Q1-E1-H8  
 <400> 2173

tcaagtgaat aaggtagatt ttttaccgaa agtatatgaa aaaattgcag ccttattaag 60  
 ccaaaaaaat ttgacaatcc tagaaaagta aacttgaaat ttgcgtgaca aaaagaaaga 120  
 aaaaggaggagg aaaagggggg agaaaaaaa aaaaaggggg ggaaagaaag gggggagagg 180  
 aacaaaagga tcaaacggg gggggg 206

<210> 2174  
 <211> 409  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-044-Q1-E1-A1  
 <400> 2174

acaaatgcgg agtgactaac tattttgatt gctgcttaca ggaagctttg gaatggcgac 60  
 tcccaactca gaagatgaca gcgtttggaa agaaatattc cactcattca ccagcagatg 120  
 gtcgcaaagg ctaaaacgtc ttccagagct tccttcgtat attagaagtg gtgctgcgtg 180  
 ggagtcggtg acaagaaagt tccatgactg gaaagaggca gttgtggcaa atccttatcc 240  
 tgctgcagct tatgtggtga cttttggtgt tctgtatggg aggcttctat ggacaataag 300  
 agtgtcaaga atagaagagg ctaggatcag acgtactttt caagaagtga aggatcgaca 360  
 agctcgagaa aaagcaatac aacagcttcg tgaacaaaaa ctaaactct 409

<210> 2175  
 <211> 421  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-044-Q1-E1-A2

<400> 2175

accacgcgtc cgggatggag tctcgtgtga cgtggatgct gttaaatact actcagtagt 60  
caacgctgca gctgccatat gtaacgttgg aaccgacgcc aactctacgt tcttgcttgg 120  
gcaaaccaca ttacggagtg ttctccgaca cgtagacctg gataccttac ttgccaaaag 180  
agaccaaatt ggagaggaga tgcgtaaagt tctagataag gagacggagt cgtgggggtat 240  
acgagtcagt aacgttgaga tacgagatgt cgttttgcca accgatatga tacgtttcat 300  
ggctagtcaa gcagaggcag agagagaacg tcgagccaaa attaatttcg ccgatgggga 360  
aatttcagtc gagtcaaaag ttggcagaag ctgctgcggt tatgcaaagg gagccaatga 420  
c 421

<210> 2176

<211> 194

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-044-Q1-E1-A3

<400> 2176

accaaagaaa aatcgacaaa cagttcttgg tatgccaaac gcttggcact agctagcatt 60  
tatagaagtt ctgagttgta ctggatttcc gatacatcgc aaggccagaa aatgacaaac 120  
gcgtttattg cagaatggat acatacctgg gataaaacgg actccaactt gagtcgattg 180  
gatgcaaaag caaa 194

<210> 2177

<211> 367

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-044-Q1-E1-A5

<400> 2177

aaccacgcgt ccgcccacgc gtccgcccac gcgtccgcgg acgcgtgggt aaattatggc 60  
ggaccatgat caagtggtag cgtacaagcg ttcagaagaa gaaaaatgga gccaaagcaag 120  
ggaaaaaaga ttggaattaa tccaaacaat ggaaaaaggg aatgcgaatg gccccctttt 180  
cccaaaaaaa aaagctctat tttccaatgt gctagatttt gggaacctgg cttggttccg 240

gagaaccac tttgcaatta cctgcgaaag taagaggcta ttctgtacct tcaggagaga 300  
ccacggggga agtgggggat aaattgttgg atatattacg tccatcttat caccaggaag 360  
ggaaact 367

<210> 2178  
<211> 406  
<212> DNA  
<213> Cyanidium caldarium  
<223> unsure at all n locations  
<223> Clone ID: LIB190-044-Q1-E1-A6  
<400> 2178

aggaattgtt tttctctact ttaaagaaga actttgagtc gaacgaagcg tcatgggagt 60  
gcagtgtagt tgaaaccgca gttgctgttt ttatccagta ttatgaacag tgtgtggaac 120  
agtactatct agcaagcaaa gattatgagc tacctgggta ttccaaagta aaacagattc 180  
ggagtatgat tgaagatgtt ctacagatag agaaggaact tggaaatatg cgtcagactc 240  
ttgttggcgt tcggagtcgt ctttgtactt tcgaagctgc atcaagcagc gaaactcttg 300  
tgcaatgggt gtatgaaaga aatggaatga actcttgttt gtattcttgc ttacaggtag 360  
gtactctgtt gcgtaatttt gacttgggga attttanaga agtgtc 406

<210> 2179  
<211> 345  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-044-Q1-E1-A7  
<400> 2179

accacgcgt ccgggaagag aaggaataaa caagaaggaa taataaccaa aaagtgggta 60  
atccaaaagg aaaaagccca aaaaccaaga ttaaggatca aagttaagaa agaaaggaaa 120  
aggaagaag acaaggtaag cttaaaaaca agaaaccaga gaaggaaacg ttaaagcatg 180  
gaagaaaaga aattcgaaaa agaacagaaa aagggttagaa agaggaccga atcaaggtaa 240  
aagggttaagg accaagaaga taagaaaaaa tccggggtgg tttatcaaaa caagaaaagg 300  
gaatttaaag gttaaaaagg ggaagggttt tacaaaaagg gggtt 345

<210> 2180  
 <211> 417  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-044-Q1-E1-A8

<400> 2180

gatagaacaa accctgtcca actatttctt tgatgatctc gagtatattc ggagaacagt 60  
 agcagatgag aaaccacaaa ttgaagagaa gcttcgacac ctttgtgatg actgtcattg 120  
 ttgtgtggtg ttcacgacag gaggaacagg ccctgctcca agagatgtga ctccagaagc 180  
 cactattgca gtgtgtgata agttgttacc tggttatgga gaagctatga gaagtgtttc 240  
 gagggaaagg ggagttgtaa cagccatact ttccaggcag caagcaggaa tccggaatag 300  
 aagcatcatc atcaacttgc gaggttcaac gagagcagtt gaggaatgtt tacaagttgt 360  
 tttgccttcc ttggcgcatc gtgtttcggt gttacaagga gaatctattt tgcaccc 417

<210> 2181  
 <211> 402  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-044-Q1-E1-A9

<400> 2181

aggactcncg tcttcaccgt cgtcagttgc ttccaagttg ctccgatagc ttttcgtaga 60  
 aactgttggt tgcgttagaat aatctgttac aacaatcgtc atcgttgttt tggttgtggt 120  
 attcgacceca atatattctc gtggaatttg gaaagaagag ggttaccaag aggaaaagta 180  
 tcttttattc atagcagact cgtacatctt ccatcagaag ttagtggttac tagtatgacg 240  
 accagagaag tggttgcaac tcgagtaacg gaagcactca acaacttggt tccagatgaa 300  
 gaaagtccgg atccacaact cactgcagca acccgccag aatttgagga ttatcagttc 360  
 aacgcagctt tgtccttggc aaaaaagaaa aagatgaatc cc 402

<210> 2182  
 <211> 413  
 <212> DNA  
 <213> Cyanidium caldarium



<223> Clone ID: LIB190-044-Q1-E1-B10

<400> 2182

aacgaacgaa agtctatggg atattctaga atggatgaaa gtttcaagga aattaaggaa 60  
atacgacaac ggcttttgag aatgcgggaa gatcttgag agccgtcagc taatgaacca 120  
agtgttcctg tttccggaac gcaagatagt cagtcgacaa agttttcgag ccccgctcgtt 180  
tgacaagtga aagagcagcc gacgataccg ccgatgtgga aggttattgg aagctgttac 240  
ctggagatat gttggacaat gatcgggata gtgttatgaa tgttggtgga aacggagttt 300  
tttccagtgt acttcgtgcc ttggcacata gcaaagatac gactagggaa gttgctatca 360  
aagttattcg tcacaacgat gtaatgccaa aagcaccaca aaaagaaatt tct 413

<210> 2183

<211> 233

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-044-Q1-E1-B11

<400> 2183

tcgacccgag cgtccgacgg acgcgagggg gatagagcat aacttctaaa cttatttatt 60  
tgaacgcaat tgaagtaata taaaacagtt ttgactaat gaggggaagat cttgcagagc 120  
cgtcagcgga tgaaccaagt gggccggtct cagggacgca agcgagttag tcgagatggt 180  
taccgagggc cgtcgcttga ccggtgacag agcagccgga cgcaccgccc atg 233

<210> 2184

<211> 101

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-044-Q1-E1-B12

<400> 2184

cgcgaggggg aaagagcaaa acttctaaac ttattttatt gacggcaatt gaggtattat 60  
aaaacatttt ttgacgaaag aaggcagatc ttgcagagggc g 101

<210> 2185

<211> 425

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-044-Q1-E1-B2

<400> 2185

aatttgccga ctttggggga aagtatggat ccttggctaa aagcggttgca acttcaccgc 60  
caacgaagaa agcgactgga agagaactca gttgatcaag aagcaacttt gggggataga 120  
aactacgaag acgaagataa aaagacttca agtcaccgtt acggcaccac aattgagcga 180  
ccttcgttgt atgatgaaac ggaaccgttt gctttcgaaa aaaggagtta tgtgaagaaa 240  
agaaggaaat acaaagattt ttatgatcgt caaacattca natcacaang gaaacggctc 300  
cacttcagg gaanacggaa aaagcggtgt agaaagtcc tacaagaata gtcccagaaa 360  
tgcccaagag gcgtctttta agaacgacaa ctatttgga aatggctctt ccacganaag 420  
agata 425

<210> 2186

<211> 409

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-044-Q1-E1-B3

<400> 2186

cccacgcgtc cgcccacgcg tccgcccacg cgtccgccc cgcgtccgag gatgacaagt 60  
ttgccagaca agtacggctt ttctttggag gactatgcat ttctgtttca gagtcaacca 120  
aaggaattga taaaggagt atcagctgat gatatagaag gaacacttcc caaagatata 180  
gttggttctt actttctgaa tggctctggc ttgttgacaga tagatggaga ttggtttcat 240  
ccctttgacg gacatggttt cattcgaagt cttaccttta gaggtgatgg ttcttgtttg 300  
tatcgttcca aatatgtgaa gacggaagcc tacctggagg aaaccaaggc tggacacgga 360  
gtatatcgtg gctttggaat gctctcaagc gggttggtggc gcaattgga 409

<210> 2187

<211> 422

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-044-Q1-E1-B4

<400> 2187

cccacgcgac cgcggacgcg tgggaaaagt ttccattcag catggctcct aaagggtgcta 60  
aaagtgtacc cgttgcaggt aaaaagccgg tggcaaaagt tgaaaggaag aaatcaaaga 120  
agaagagatc ggagacgtat tccatttata tatacaaggt tctgaagcaa gttcatcctg 180  
acaccggaat atccgcaaaa gctatgagca tcatgaattc ctttgtgaat gatatttttg 240  
agagaattgc gtcagaagct agcaaactag ctgcatattc gaaaagcaag acgcttactt 300  
cgagagaggt acaaactgcc gttcgtcctt tgttaccagg agaacttgca gaacacgctg 360  
tatcggaacg tacanaagca gtaacaaaat acacttcttc ttaacggtac aacaagtgct 420  
ca 422

<210> 2188

<211> 410

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-044-Q1-E1-B5

<400> 2188

cctttgcgca gttggaagat aagataagtt ctgcagtgtc agctgctatt ggaaaggagt 60  
tcaaggctac agtgggtcct tctgtcgggtg gaggatgtgt cagtgatata agagttattc 120  
tttgtaaaga ctccgacagt ttgaagtttt ttgcaaagat cggcactcct gatgaagtaa 180  
gcatgttggc agcagaatat cacgggggtct tggaaatgta caacacgaaa accataaggg 240  
tgccgaagcc catttgctat gacagtacag accgcttttag ttttctgac cttgaaaacc 300  
taaatatgac aagtagagca ggaaggaagg aatatgggtt gttgggaaaa aaccttgcca 360  
aaatgcatcg ctgtactagt gacagaggct ttggttggca cagangaaat 410

<210> 2189

<211> 410

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-044-Q1-E1-B7

<400> 2189

agaagaagag atatgcggtg gtggacaagg caacttgttg tttctacaac aatcacaaca 60  
 aaaagtgttt ggagtagata cttttctcat tgtcgggtaca acaattctgg actactagtt 120  
 gcttccacca acaacaacta ttcagagttg ggttggagga gatatggaag ttggcctcaa 180  
 agaatagcca gtataaacgg gatagatgaa ctggtgaaaa ataaaaacct cgtacgggaa 240  
 tattaccaag gaacgagtct taatgtctcg ttgctattcg atgaacctct gaatggttcg 300  
 tctctgagtt gggaggacga tgatgatgat tcttcttctt ctggttcttc tggttctgag 360  
 agtgacgata gctttgattc gtcacatgat gaggatagct cggatgatga 410

<210> 2190  
 <211> 402  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-044-Q1-E1-B8

<400> 2190

cccacgcgtc cggaggcggc aagttgttgg ttgttggtccg aaaacttttc agctttggaa 60  
 tatgtcttga aaagaataga ccatacttca ttggaacagc tattagaaca agttacccaa 120  
 gaggttcaac aaatattagc agacgtaata caatatttgt tagaaaacag gcaacaagtg 180  
 gaatatacag tgaaacaagt caagcagttt caacagagtt ggataaagat agagaaaaaa 240  
 gtggcgcaag tagagagtca actaagctta ttggaaaagg aagtagcaaa ggacttggaa 300  
 aatagcgcca aaaatttga agaaaaaaga aaatatacca actggaaggt cgctttggag 360  
 gcactgcaaa gaaaaaataa aactttgagc agtgcttggc gt 402

<210> 2191  
 <211> 416  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-044-Q1-E1-C1

<400> 2191

accacgcgtc cgcccacgcg tccgccacg cgccgattt tattgcttgt cgtagcagct 60  
 tctggtacct atgcttctcc tttattccat acttatcggt cctcctcgaa cgatacgatt 120  
 gctgcagaat tggagaagat gaaaaacttc acaactctgt tgagtctagc caaaattgcc 180

aatctgacta gtacttttga aaacgcttct cttgcagtta cgctctttgc accaacagac 240  
agcggaatct cttcaacact caaagcagtg aatatttcgg caagcgccat agagaaaaac 300  
agcactctgg taaagatgat actcgagtat catgtcgtac ctgagccatt aaagacttcc 360  
aaattctccg ctttgaactc ttacaaaact ttggaagggt tcaatatcac cgtgac 416

<210> 2192  
<211> 268  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-044-Q1-E1-C10

<400> 2192

accacgcgac cgcccacgcg tccgcccacg cgtccggtca ctttgccatg gaagctttgg 60  
ggactcgttt gacgatgcta acaactccaa aaccctaaaag ttgataacaa agtattttacc 120  
aaactattca atctgtgttt tcaaataatc taggagcaaa atgtataaaa gtaagaagcc 180  
gtagaaagag agacctggaa acgaattttc ttcggtgtaa atatcttctt tgtttgctct 240  
aagttaccac tctagaagca caacaaaa 268

<210> 2193  
<211> 387  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-044-Q1-E1-C12

<400> 2193

accacgcgac cgatgacagt tggaattgta acagtagtaa ttcattaacg aaagagacca 60  
actcagcatg cttttggcgc aacgagtcga ttttcaaagg atacagtaca ctttgttcaa 120  
gatgaatcta gtcgttactc caatggacct atcatggata aagatttaga agagtgggaa 180  
gcagatattg acgcggaagt ggaagctttc cgtaagagac tcgaggaact tagtgcgcca 240  
ttgaagaata agccataggt cgggtgccttt ccgcatcggt ccaggacatg tgagcagtca 300  
ctaaggaagc tttgtaccac aagttttcag agtacaaatg agaattcgag taaaacgagt 360  
agcgttggtg tcttatgaag tgttcta 387

<210> 2194  
<211> 140  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-044-Q1-E1-C3

<400> 2194

aaaaaaaaa aagatatact tgtgtctgta aaaaaaaaaa aaaaatcggg atatgctcac 60  
caagacacat aaaaaaaccc catgcaaaaa actataaaaa aaaaaaaaaa aagggggggc 120  
cccccaaagg atctaacctt 140

<210> 2195  
<211> 366  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-044-Q1-E1-C4

<400> 2195

attgagcatt gttttggcac tgtttttttt ggggtttcac tctgtgtgtt tgtcttgaca 60  
aaactcgaag aagactatct atttcttggt atgtttgaga gttatttcta gaccgtgttt 120  
ttgggggtgt tgtactcctg tcttggtggt tggatgaatg ttctagtac aaagaagggt 180  
gtcactttcc cgccattctc cacagcttca actaccaact tgtatacgcc cacaactgca 240  
caactatatt actacagagt cgtggtgtag agcgacaagt tgaatgggtg aaaaggcttg 300  
gtgaaaagtg gaagactagt gagagagagc acttgaaaac ttgtaaaatt ggaccccctg 360  
gaaact 366

<210> 2196  
<211> 411  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-044-Q1-E1-C5

<400> 2196

aaataaacta tttctgcacc aaaagaatag ttaaggatct aggccacaaa ttaacagggt 60  
aagggtatgt gcagaaccgt tcaagtgcga attagaggct ttagggctat ccttattttg 120  
gatagagctt ggttctcgct ccacatcaaa attccaaacg atagtataaa caaatagttt 180

ggcatccgct tgaatctttc aatacccta tcttatcatt gtaatgaagg attttgagtt 240  
 gttttactgg ggtggaagat cagaaggaag aatgggttct acgacagaag aatatcgcat 300  
 ggattaacta caagtgaaga tgattgggaa ctcttttgaa acgctatgac agaggatata 360  
 ctcaaagcct tgtgccttta accatagaaa cggacaacta ctcgaggaat c 411

<210> 2197  
 <211> 223  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-044-Q1-E1-C7

<400> 2197

caagggaata gatggctatc tttggtacat cgtggcagcc ggaagctttg tgatatggtg 60  
 gtcattcctt gccttgttta tattcaaaaa cagatcgcta ttaaactatt tgaacaattt 120  
 gtacaagaag aagaggaaag atatcaactc aataaagtag tatggcactt gtatcattcc 180  
 tctaaaacat aaaaacattc ataaaccata acttaacact agg 223

<210> 2198  
 <211> 394  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-044-Q1-E1-D1

<400> 2198

accacgcgtc cgagaagggg agggaggagg atgcaagggtt ggaagaaacc agtcataacc 60  
 gatgcttttg gaaacagagt aacttatgtg ttgaaaagat atttcaacgc acctactact 120  
 ggagaagagt tgccacattc gttgggtggt catgtgaccg atgcagatac gttgttacgg 180  
 cacaaagggc tgggagaaga aacagcgat tttctgaaag aagacgctcg caagtttgaa 240  
 aagttggcaa aacagttgaa aagtgcgttg aattcagggg aactaatgac aaaagaacaa 300  
 ctcaaagtgg ccatggaaca gagaggaata caagtatctg aagagggtta nangacttgc 360  
 ttctgtctaaa agagcacatt cgattctcgg atgc 394

<210> 2199

<211> 409  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-044-Q1-E1-D11  
  
 <400> 2199

```

acccaattaa agtagttgtt ttatatattcg ctgatatgcc tttgtttctc aaaacatatt 60
gaaagctttt gaatgtgtta aagagactga tttttcttta tttttgtttt cgtgctagaa 120
tttgtttatg tttcctgttc gtcgcctttc ttctatttct aaaggacaag cctttgaaca 180
cgctgtgttg ttgtatcttt cctacttggg ttttttcata cgtagtactg gaggagttgg 240
tgacggcggt atcgactttc gtggaacttg gaaacctaataaagcaatag agcctgtacc 300
tgtcgtcggt cagtgtaaag cattatcagg aaaggttggt gttcacgtta tcagagagat 360
ggaaggaatc ttgtgccgcg aagagcctgg taccttgggt gctataatg 409
  
```

<210> 2200  
 <211> 405  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-044-Q1-E1-D12  
  
 <400> 2200

```

aaaacattac acttgtaaa tgatgagacg cttcttggtc gtttctgtgt tcttcatgct 60
atatgtttcc taatatgggtg ctattcatgc agctccttta tccatgcac atctacaaga 120
ttcgtcttta ctatacaaat ggcaacaatc agaatcctta ccaacttaca agagacagac 180
tgtcaatgca accgccgctc caactccac agtcagtgtc ggagaaacag atattcaaat 240
tggattcact ggggccgag taagaatggc tcaaaagttt ggaatgctgc catccaaaga 300
acgaactgta attacggttg cacaagatga cgctgcggat gcgctcatat tggagaatgc 360
ctcgccttat catgtcattc aagtggaata tggtggcagt ccttc 405
  
```

<210> 2201  
 <211> 340  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-044-Q1-E1-D2



<400> 2201

agcaggtcca ataacggaag tgacaatgag agtgagcgtc cttcgcgact ttcgcgagaa 60  
aatagcaaaa agcgtcgggt aattgtattt gttgctggtg gtgtgacggc ttctgaaatg 120  
cgtttggctt atgaactttc caagaactcc aatcatgatg ttattattgg tggctctgta 180  
atattgacac cgaagaagtt tattgagaat ctgaacaacg tagtgcaaga ttttggaat 240  
ggtaatcaac tttctccgcg tggttcgtcg tccgcattga natagtttcg gatattccca 300  
atctcatcga ataaagtgtg caacaacggt tgtgttgggc 340

<210> 2202

<211> 405

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-044-Q1-E1-D3

<400> 2202

aggacgcgtg ggcggacgcg tggggtcgtc ccattgggat tctcattgtt gttgttattg 60  
aggaacacgg aggacgacag tagcgatggg attgtttagt agactgtttg tgaaaccgag 120  
tcgtgtaccg caaagagtcg tagagtttca aaagcgcaag gcggaagggt acgttacata 180  
caacgccggg aagtacgacc gatacatcaa cacacctatt tacctgtttg tgccttcac 240  
cggctcttat gcccttactg acggttgtct ttgggcggca ggaaagaacg aaagtcaatc 300  
gtgaatagcg ttttttgtcc ctgtgggaca gtcttatgaa ctagtgatc ctttgttctg 360  
ccagttttag tttcctgtaa tgaaagtttc ctttttttc cttgc 405

<210> 2203

<211> 305

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-044-Q1-E1-D4

<400> 2203

gtctccaaga acaagtgcag aaaatgagaa aaaggaagct atagctaact tagctgtcat 60  
gtttccaaac ttgtcgcgca ctgagttatc gaacgctttg gaagctaata gctattcagt 120  
tcaaagaacg gttgactaca tactctcgga aaagtcctcc tctcaccgc cgcgggcagc 180

agaagatgcg tccgaagttg ccgctcgcat cgctcaggta gaggaagacg aacgttttagc 240  
 tcgtgccttg caaagcgctt atgaacggga aaataatgtt gaaagacaga ccatgtctcg 300  
 aacga 305

<210> 2204  
 <211> 406  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-044-Q1-E1-D5  
 <400> 2204

accacgcgtc cgcccacgcy tccgcccacg cgctccgcca cgcgtccgcc cagcgcgccg 60  
 cccacgcgtc cgaaaaatgc tagattttca tcgaaagcat ggcggaatgg gcacaatctt 120  
 agtcactcag gtggaagaac caagcaaata tgggtgtcgtt ctttttgaca agaccgggaa 180  
 gattgaacgt tttgtagaga agcctccaaa gtttggtggg aacagaataa atgctggagc 240  
 atatttgttt agtcctagta ttttgagaa gctgggtttg agagcgaact ctatccagaa 300  
 cgaagttttt cccggaactg gctgccgaaa ggactggtgg tatgcagttc gaacttgatt 360  
 cgtattgggc ggatattgga caaccaanag attacttgac tggaat 406

<210> 2205  
 <211> 407  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-044-Q1-E1-D6  
 <400> 2205

acggacgcgt gggagagatt ggaagagtcg tcctggtgaa ctatggcaaa gaccgaggca 60  
 aactgggagt cattgtggat gtagtagatc ataatagggc gttggtagat ggtccactca 120  
 cgggacttgc gagacaaacc atcaactgga agagcttaac gttgaccccg ttcaaagtaa 180  
 agattcaaca ctccagtcgt acaggagttg tgagaaaggc atgggaagag gcgaaaatca 240  
 cggaacaatg gcacaatagc gcgtggtata agaaactttg tgcacgaaga accatacaaa 300  
 aacttgagga ctttgataga ttcaaagtga tgattgccaa gaagagaaaag tcggctatga 360

ttcatagtc a atggaaaacg ttgaaatcgc aacatcagta aaacatt

407

<210> 2206  
<211> 407  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-044-Q1-E1-D7

<400> 2206

acatggttgg atatatgtgac tctggaaagg atggtggcag attgactagt gcatgggaat 60  
tgtacaaagc tcaagaaagt gtcaccaagg ttgcagagaa atatggaatt actttgagat 120  
tctttcacgg tcglygtgga acggttggtc gtggtggagg aactcagcat cttgccattc 180  
tttcacaacc tcttggtact atcaacaaat atttcagagt tactattcaa ggggaagtta 240  
tacaacaaga ctttggtttg cctggtttgg cagacaggac attggagtgt tatttgacag 300  
ctatcttgaa agccgaaatg atgccttatt ctcaagtga agctgagtgg agagaactca 360  
tggaactgat gagccaaata tcttacaaaa catatcgag tgttgtg 407

<210> 2207  
<211> 397  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-044-Q1-E1-D8

<400> 2207

ctttattata ttaagtttat cctcctttgc atttttagac gccgttecta gtcgacctat 60  
tctttttcct ttggaagaga gtcaatgagc actagttgga ttcttcggtg tataagaact 120  
tatcatcgac tcttagtgga caagccagtg ataaccaaact cagtaacttg tggatttctt 180  
tcttttacag gagacataat ggcacaaact atcgaacaca agtactcgat gaataacaac 240  
aacaacaata acagccaatc gaatacttgg agaattattgt ctcgtatcga catgggacgt 300  
actttacgtt ttacttcctt tgggtttcct atatttggtc caagtgtcga ttattgggat 360  
cgcttcttag ataagttgtt tcccaaagcc actactc 397

<210> 2208  
<211> 410  
<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-044-Q1-E1-D9

<400> 2208

accacgcgac cgatttggcg gaagtcgatg gaaatcttaa gacctgctgc tggatgatcct 60  
gttgggacgc ttagttttgt cattgcaact gtacaaaaat ataaaaatta ctgtacttgt 120  
cgtgctgtat atggccagaa tacctgtatt ggtggttata gcaagtttca agagtctttg 180  
ggtggtcgca agaattgacag aagacacagt tggcagatga caacacgcaa agaaagcaat 240  
agtttcttcc agtttctgca aaaagtagtt aatccaccaa aagatgatac cacattgcgt 300  
aaatatcatc aagtcgttca acgtatcaac caactggaaa gcaacctaaa ggctctctct 360  
gatgcagagc tgaaagaaaa aactcgaata tttcaacaaa gactataaaa 410

<210> 2209

<211> 229

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-044-Q1-E1-E1

<400> 2209

agaaagaggc aaatacgga aagcagtaaa agaagaaaga gaaaggaaaa aactgagtat 60  
caggaagaaa agaggagta gatgaggaaa gaaagatcaa ggaagtaaga gtaagagaag 120  
gagtaatgtg aatgaaagca ggaaagtatt tgaagaagag agtgtaaagc gcgtaccttt 180  
tgcataatgt cccagcgagt gaaagaggaa gcaaaaagaa agaaaaaga 229

<210> 2210

<211> 290

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-044-Q1-E1-E10

<400> 2210

cggacgcgtg ggacgaaaca tcataggaat ccgttggtgt cccctgacaa gtatcactag 60  
tactggtata actaacgcct attgatataa ttgaacttcg agtaacgggt gttagaaatg 120  
tcccgttttc cggtttgaaa ctctcaaaa tattttggct ggtctttccc ttgtcgtcaa 180

cgatatgggt ctcagaatgt ctatcatgca aggttacact agcttgagta atagcaacga 240  
gagaaattat agcaaataga aagagtaaac ctttgaagac tttcatcttc 290

<210> 2211  
<211> 260  
<212> DNA  
<213> Cyanidium caldarium

<223> unsure at all n locations  
<223> Clone ID: LIB190-044-Q1-E1-E2

<400> 2211

aggtgtatga tgcangcaaa gaagtgacgc agtagatcag agagtaacac atgcaagaag 60  
gaagaagcag agaaggacta tgagcgagaa ggtggatagt cgagagggaa aaagcccaga 120  
agccaagata aggtatcaaa gtaaagaaag aaggaaaagg agaagaagag aggggtacgct 180  
tagaagcagc aaaccagaga ggaaagcggt aaagcatgaa agaaaagaaa tccgaaaaag 240  
aagagaaaaa ggtaagaaag 260

<210> 2212  
<211> 393  
<212> DNA  
<213> Cyanidium caldarium

<223> unsure at all n locations  
<223> Clone ID: LIB190-044-Q1-E1-E3

<400> 2212

accacgcgac cgcaacgaga cacttttaag gtttctgtgg gttggactgg cttgccttgg 60  
aaagtaagcg ttggtcctga aaggaacgaa ttcctcccct tgttgcctt gttttcaacc 120  
tggtgttttg aaagtaatac gatacagtcc aacgctgaat tggttggttc acaaggagtg 180  
tctaagaaac gacagttttc ttgtcatcag tggattgtan ggaatacgag aaatacgaa 240  
gatggaatag aattgtatcc atcgtcgtag atagataacg aggacatata ttccaagaat 300  
attggaagaa acacacatca atatgtcgtc caaatcctgg tccaagtagt gcgaagacga 360  
cctgtatatc cacagctagt ccaacaagt atg 393

<210> 2213  
<211> 395  
<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-044-Q1-E1-E4

<400> 2213

gcaaagactg ctctgagttg cctctttctc tctttcctta tcgctgccgc agttgcagcc 60  
gacgtagttt cagaggagag atggggatat gtcagcaaa cccaacaaca gcaacagtgc 120  
caacaagtat gtaaacagta tgcatactat cagagtccag tctgcacttc cgtaaccaca 180  
cagagcccat actggacca atgctcgaag actgtgcaaa cttttgtccc aagccagtgc 240  
agtacttata cccaaatccc ccaaaatgga ccaatggcac acctacaaca aactagcgt 300  
tacaacccaa tgcaacaagg ccgtgactac ctatactcaa acctgctgtg cttatgcccc 360  
acaaacttcc tatgcagtca gtaccgagca atatg 395

<210> 2214

<211> 414

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-044-Q1-E1-E5

<400> 2214

aggcaacttc aaggtaaggc ttgagctcca gttgcatctt tgtcgcaaac caacttatcc 60  
tgttggcaag atgttggtt atcgtcgcga aaaaacatta tttgtttcct cgtttacacc 120  
ttgtttctac gccaaatttc tgtcaagtat aagaagaacg aacctttcaa tttgtaggaa 180  
aacaaccagc aaggagtgtg gttacgtgtt acgcatgggc gcagataact tgagtaggtt 240  
gtctctctgc acttttctat ttattactta aaaagtaaag agttttggaa agatttttgg 300  
gctggtggct ttcctggagg agaagcttat ttgaaggagg tgatagagag taactttcaa 360  
aagccagttc caggactcga tactagtgga gtaacgggac aaggggaaga aaag 414

<210> 2215

<211> 388

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-044-Q1-E1-E6

<400> 2215

acccacgcgt cgcgccacgc gtccgagacg tttgaaaggc gtccagtatg aaaggagaca 60  
 caattgtacc acggtcaatt cttcaaactc gccgaaccac cactaactgt gaaaatgcag 120  
 taaactacca ttaggacgga aggaccccat aattcttgac aaaataggtt aaggaaggaa 180  
 agagaacat gaattacaga agttgggtta aaagatgaag gacaattgca tgaggatagg 240  
 gactctacgt gattacggaa aataccctta acacattttg gcggggaaat taacacctaa 300  
 cacagtgtat tttacgcacg caagggcatg agagatgtat aataccagaa ccattcttga 360  
 agaagcagac tgatatttca caggggga 388

<210> 2216  
 <211> 395  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-044-Q1-E1-E7  
 <400> 2216

aagacatagt gaaaaccact cgcaagttga cacttccga aaagacagaa cagaaaaaag 60  
 gcacagaagt gaacactcga ggcattggcgt tcgaaagaag acaagtcaca gccatcgacg 120  
 cgagcgaaga cagcacta gtaacacacc aaaacatgat aatagaaacc atagtgaggc 180  
 ggttgacaaa gtagaagaga tgagagcgac ttattccaag caaggatatg gcttagtggt 240  
 tccaaaaggt gcaagctatc atggttgga accaaatgaa gaaagctcgg cgcttagtag 300  
 tagtagtgac aagtccaaga acacaaaatc gagaatgaac acagaagcta caaactcgga 360  
 cgcagtgaaa gctcatcggt cctcgactag tagag 395

<210> 2217  
 <211> 420  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-044-Q1-E1-E8  
 <400> 2217

gaaaagagag agaagaaaga aaagaagaga aaagccgtac tgaagaccga cacaggtact 60  
 cgaggagaaa ggagacccaa attaaggtga gagaatggac gataaggaac taggcaaaag 120  
 gatatggtat ctgcggtaga acatatgaaa gaagcagcac cgactgttta gcaaaaacac 180

agcactctgc agaaaagaga aaatgtaaag tatagagtgt gcggcctgcc aaatagtaga 240  
 gaagaaatcg attaaaagtg aaagcgagta aaagatgagg tatagagaat ggcggtccta 300  
 acagtaagga tccaaaggta gcgaagtaaa tagacgtttg aaaggcgctcc agtatgaaag 360  
 gagaaacgag tgtagcactg tctagtcgtc caactcagcg aaacagcaat aactgtgaaa 420

<210> 2218  
 <211> 412  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-044-Q1-E1-F1  
 <400> 2218

accacgcgac cgcttgctcg cagtgttggg tgagaatagt aaaacatgac gagatattcc 60  
 aaggaaccag ataacccgac gaaaacttgc aaagctcgtg cttcggatat tcgctgcat 120  
 tttaaaaaca cgcgagagac gggacgtgct ttgaaaggaa tgagcttaca gagagcaaaa 180  
 acttatttga aaaacgtgat agagaaaaaa gagattgtac cttttgtacg ctatcgttat 240  
 ggtgttggtg gaaaagcaca agccaaacaa cacggttttc ccaacggaag atggccgaag 300  
 aagagtgcgt tggatatttt ggacttggtg aagaacgcag agtcaaatgc ggaagtgaag 360  
 gggttgaatg tggactcgct ttatatattcc catctacaag tgaatcaagc ta 412

<210> 2219  
 <211> 400  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-044-Q1-E1-F10  
 <400> 2219

acgcgatcgg ctggtcttgc gcattggaga gtcttggcgc catgaatata gttactttgt 60  
 atggagtttc tttgccacta acagttgctt gctttttgtt tcagtttatt accgatcata 120  
 ggacttggtg tttctttgcg ttcatagact attatcagct tcttccagat cagatcctgc 180  
 acaagtcagc ccacattgct tataccagcag tgctgcctcg agttgtgttc aatcagattg 240  
 tcttttatct gccagcttt gttcttctgc agtatttgtg agttgcgtcc tgttcctttg 300  
 agcccaagag ctctatatgg ctgtatgttg ctgattatcg tttctactcg ttccctcatg 360



aaattatcgt ttacagcggt catccattcc tgttacattc

400

<210> 2220  
<211> 403  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> unsure at all n locations  
<223> Clone ID: LIB190-044-Q1-E1-F11  
  
<400> 2220

accacgcgat cgttttgctt cagccatctc cgacgtagtt ctcatcaatt tgtgggtttca 60  
cgacgtggga agaacagaat ctgtcagtta ttccctattg caggctatatt ttgtagaagc 120  
tgcaaaggcc gctgctgaag gtggtgcaat taaaacgctc atgtgctttg tagttcgaga 180  
tacggatcct tcttatacga cggaggaatt gaagaacata ttgttgcaag gggctanaga 240  
tatttggaac actattccaa agtctggaga ggcattcgac gccaagctgg aagacttttt 300  
tgactttgat ttgtttgcct tgccacatat gcactatgaa aaggagcaat ttgaaagaca 360  
gtgcaatgaa ttgagagatc gattttcttca agagtccaat ccc 403

<210> 2221  
<211> 409  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-044-Q1-E1-F12  
  
<400> 2221

accacgcgac cggactactt caagattccg aggggtactt ctcatcaatt tgtgggtttca 60  
cgacgtggga agaacagaat ctgtcagtta ttccctattg caggctatatt ttgtagaagc 120  
tgcaaaggcc gctgctgaag gtggtgcaat taaaacgctc atgtgctttg taattcgaga 180  
tacggatcct tcttatacga cggaggaatt gaagaacata ttgttgcaag gggctagaga 240  
tatttggaac actattccaa agtctggaga ggcagtcgac gccaagctgg aagacttttt 300  
tgactttgat ttgtttgcct tgccacatat gcactatgaa aaggagcaat ttgaaagaca 360  
gtgcaatgaa ttgagagatc gattttcttca agagtccaat cccaattt 409

<210> 2222  
<211> 301

<212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-044-Q1-E1-F2  
 <400> 2222  
 atgtttgttg tctggttgct caaggtgtga aatggcagta gttgaagata acagagtctt 60  
 tgttggtggt cttccttggt cagttagtga agaagacctt cgtgaaactt tttccaaata 120  
 tggagaagtt gttgatgcaa gggttgttgt tgaacgtgaa actggtcggt cccgtggttt 180  
 tggtttcgta tcctatgcag aaggttcctc cgtagacgaa tgcattgccg cactggatgg 240  
 caaggatatg caaggacgca ctattcgtgt gaacaaggca atgtctcgtg aacaacgcga 300  
 g 301

<210> 2223  
 <211> 420  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-044-Q1-E1-F3  
 <400> 2223  
 agacattgac gtagtggttaa atgaataccg agagcaaaac tgtcaaactt gtgagtactg 60  
 aaaatgaagt ttttgaagta gacacaagca ttgtatccct ttctgaaaca ataaaaaacg 120  
 tcttggaaga taccgaagat acagagagca tacccttgcc taatgtacaa agacgaattc 180  
 ttgcaaaggt tatcgaatat tgtagatata actcactcct aaaagaccat tccgcagtct 240  
 gaggaagata ttgagcgctg ggataaggaa ttcctaaatg tagatcaacc aacccttttt 300  
 catttgattc tggctgcaaa ctatttggtat atcaagagct tgttggtttt aacttgtaaa 360  
 cgagtagcag atatgatcaa aggcaagaag ccggaagaaa tatgaaaaga gtttaatat 420

<210> 2224  
 <211> 228  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-044-Q1-E1-F4  
 <400> 2224  
 ggaccagaga gaggatgtgt tgttccacta tgttttactg gtgtatacag atatcgttgt 60

cacgagatcg gatacccttc ttaacgtgag agaatggacg ataaggaact atgcaaaaagg 120  
 atatggtatc tgcggtagaa catatgacag aagcagcacc gactgttttag cagaagcaca 180  
 gcactctgca gaaaaagaga agatggccag tatagagtgt gcagcctg 228

<210> 2225  
 <211> 408  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-044-Q1-E1-F5  
 <400> 2225

cccacgcgtc cgcccacgcg tccggaaaag agaagagagc tagaaaggag gtaaaaagaag 60  
 agtaaaagga ctagaagagg tacggaattc acgaggaagg agcgtgaagg aaggaggaat 120  
 cccaagtaat cgaggaagaa aaagcttcgg tgaaagcgtg aacggatttt gtacacactg 180  
 cccgtcaagt tctggaagtg tgctaggagt ggagtaaaca gaaaaggaag taaaaggagg 240  
 gaatgaaggg aagttatggc aaaaacacgt gccagcagca gcggtaaaac gtgtgtagca 300  
 agcgtagagc agaagaactg ggtgtaaagg tcgagtagta gagtaagtgt aaaagggaaa 360  
 ggaaaggaga gaaagacgaa agggatgaaa tgcagagatc tctagaga 408

<210> 2226  
 <211> 187  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-044-Q1-E1-F6  
 <400> 2226

gtccaaccac gcgtccgccc acgcgtccgg aaaagagaag agagctagaa acgacgtaaa 60  
 agaagagtaa aacgactaga agaggtagc gattcacgag gaacgagcgt gaacgaagga 120  
 cgaatcccaa gtaatccagg aagaaaaagc ttccgtgaaa acctcaacgg attttgtaca 180  
 gactgcc 187

<210> 2227  
 <211> 417  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-044-Q1-E1-F8

<400> 2227

cgattgaatg tgggtgaaag tcgacgtctg ctttgccacc tctttttggt gtctctcgtg 60  
tgttttgcct ttcgaagctc aaagactatt tacttcctgc atgtttttaga ggattctcca 120  
gatattgttt gtactagtct tgttacatgc ttcttggtgc gtgaatggct ctattgacgg 180  
caggggtgtc attttcttgc caatctccac cgcttcaact gccaaattgt gtgcgtgtat 240  
atacatatat ttgtagattc gtgggtgtaa aagaagagtg cagcagttga aaagtaagag 300  
cagattacta aggtacctgt agaggagcac ttgagaagtg gtcatgtcct ttacatgtg 360  
tacttttaat agctgttttt gcttgtagag attgcaagtt tagtttagtt gaaaagg 417

<210> 2228

<211> 385

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-044-Q1-E1-F9

<400> 2228

gtaacaagat caaaactgtc aagcttgtga gtactgacaa agaagttttt gaagtagaca 60  
caagcattgt aaccctttct gaaacaataa aagaggctct ggaagatacg gaggatacag 120  
agagcatacc cttgcctaata gtagaaagac gaattcttgc aaaggttatc gaatattgta 180  
gagatcactc actcttaaag accattccgc agtctgagga ggatattgag cgctgggata 240  
gggaattcct aaatgtagat caaccaaccc tttttcattt gattctggct gcaaactatt 300  
tggatatcaa gagcttggtg ggtttaactt ggtaacgagt atcagatatg attaaaggca 360  
ataagccgga aaaaataaga aaaga 385

<210> 2229

<211> 244

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-044-Q1-E1-G1

<400> 2229

gtccgaccac gcatccgcc acgcgtccgc ccacgcgtcc gagcggaaga tcttcctttc 60

gagattgaga aaatgccaga tatctacacc aagtttcgag aaagtgtgga agctggtgga 120  
aagatcagag aaccgttgga acttagtgaa ggatttccac ccagaccacg ttgtgaacct 180  
gcgtgaaatt ccaacgctta ccgaccttgg actagatgca tccccccgag cagtacctgg 240  
tgag 244

<210> 2230  
<211> 415  
<212> DNA  
<213> Cyanidium caldarium  
<223> unsure at all n locations  
<223> Clone ID: LIB190-044-Q1-E1-G10  
<400> 2230

cccacgcgac cgcccacgcg tccgaatgcc acgtatgata ngagaatatg cggatggata 60  
tgacggatgg aatanggtag cgagttatgg atcgataata acggtgttat cgatgttata 120  
ctggatgtgg ttggtagtga agagttggga gaagggtaag gagagtgagt taaggtggga 180  
aagaatgagt atagagtggg gtatgagtat gataggttat cataactgga aggaggaggt 240  
gatgttagtg aaggggatgg ggtaaggccg agtacgatga ggtaatggaa tttggatccg 300  
tgtggtggtg gttcgagtcc acctaccca gtgggggtaa tggagaggag aagaaagaag 360  
gaagagaagc ggatgttaaa gggaagatgt actactagag taagtgtaaa acgga 415

<210> 2231  
<211> 384  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-044-Q1-E1-G11  
<400> 2231

aaatctcaac caccatgcg caatcatgtt agcaatacta gatgtcgtgg tcaacgtgga 60  
taaagttaa gaaaccgaag ttataacgtc atcgaaaat cttgcgagac aatatccaac 120  
gaataaccaa accagctatc cgtcgtttgg cgagaataag tggagtgaag agaattcaa 180  
gacttatcta tgaagaaaca cgaaatgtcc ttcattgttt catggcaagt gttattcgtg 240  
atgcagttac ttatacagag catgctcgtc acaagacggt aactgctatg gatgtcttat 300

atgctctgaa acgtcaacgc cgtacccttt acggatttgg acgataaagc ctgcttgaac 360  
aaagggtggtt tctcaacacc ttcc 384

<210> 2232  
<211> 406  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-044-Q1-E1-G12  
  
<400> 2232

agcaagcaca tcccgatgtc gacacatgag aaattattcg acagcaaaga aaaaacaaag 60  
cagaaagctg atcatatact cgtcgtcata cctgtttggc agtccattta ctattcttct 120  
ctttggatgt gtaagtgtgc cttcttatgg ttgcaactgt tgagaaatga acatctttct 180  
catcagtaac catcctcaca tgacacaatc ctgatataata gcacatgttt gtaactagaa 240  
actatgaaat gatccataat caaaggaagg agataaagga ttcaccccta ttctatgatc 300  
tctattcttt ggagtcgaag aggaatcttt tctagttgtg attctccatt cgtcttctcg 360  
tggttgaat gttggaaatt gtaaataagag aggagaaaca ctgcta 406

<210> 2233  
<211> 349  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-044-Q1-E1-G2  
  
<400> 2233

atcgttgctg ctatttttgt gcatgtttca ggaaattggc gctatatgct cgggagtact 60  
ttggtatttt catctatatt actgatagcc atgcttacat taccgaaac cctcgttgg 120  
ctgatgagaa aaggaagaga ggggcagtcc tataaagtat ggagtattgt gcgaggattt 180  
gatactgaag aagaaagaca ggagtttttt gtgatgagaa agacggtgga acgggagttg 240  
gaagagtcta aaaacagata tgtcattatg gatctcgttc ggggtacatcg ctgtcgtcat 300  
gcaccaatat ttggcactat aatcgcaatt cttggtcaat tcccggaaa 349

<210> 2234  
<211> 413  
<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-044-Q1-E1-G3

<400> 2234

tcgaccacgc gtccgatcat gaaagctgcc gttcttgcac tccttgtctt agcactatgc 60  
gccgttgcta ttcaagcttc tcctctagaa gaaactttgg gtgcctttat gccgggtggc 120  
tatcaatcgc aaagccaagc accaaaacct agctgttgca agttgagctg tcaatatacc 180  
caaatttggt aacaagttat ccagactcag caagttatcc agactcagca agttatccaa 240  
actcagcagg tcattccaaac tcagcaagtt taccaaaaca caacaagtgc agcaaacaca 300  
acangtttcg tcagcatatg gacgcaatga ggtatccacg aggggatatg cccaacagtc 360  
tgtaacccca agtccttgca ccttcctgtg tcaactggtc agtcaagtgc tgt 413

<210> 2235

<211> 247

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-044-Q1-E1-G4

<400> 2235

caatcacaaa ttaaaaaaaaa aaaagggggg cccttctaaa gttttcaacc ttacttaccc 60  
ttgaatgcaa ctttatactt cttcaaaatt ttcacctaatt ttcatttcac tggccttctt 120  
tttaaaactt ctttaattgga aaaccttgg gtttacccaa tttaatccct ttgaagaaaa 180  
tccccctttc ccaatttggc ttaataccaa aaaggcccg cacttttggc tttccaaaaa 240  
ttttccc 247

<210> 2236

<211> 415

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-044-Q1-E1-G5

<400> 2236

accacgcgtc cgatggaaga atcgcaaagg cgtgtccaag gcattgtgaa agagtctgtg 60  
aaaacacttt cgaagccttg ggcaatattt attgaagagt tgaatcgtag atggcaaaaa 120

tcttccaaca gacttttgtt agttcttgga atttggtttg gggcctttgt ccttttaaca 180  
acgttgttta cctgcattct tttgtacaag gatagcctca agtcgccctc gagaaaggag 240  
aatcaggaa ataaggaaaa caaggagcaa gtagttaagg agtcctcgaa aagcccagcg 300  
tcgtctctaa ggcatcgagt tcctaaaact tcttaagggg ttttgcgaa aacgcttaca 360  
cttttttctt tatatagtcc ggatcttgca acccgtttga cgtgcaaagt acttg 415

<210> 2237  
<211> 414  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-044-Q1-E1-G6  
<400> 2237

atgatgtgga aatctttcac gtgctagtct tctggcatct acttatgtat tctctattgt 60  
ttctgtcttt tccaacaaca acaaaagcta ccaaactctg caactattgt tatcgacaag 120  
taaaaaggag tctagaaaag agcaagttgc tttcaaagaa ttgttccttg cttgttggtt 180  
tcacaccatg ttgttatttc tatgacaact tgccggcactc gtctcgatat agaaagccga 240  
tgtggactat gtgtcagcaa caagaacaac aacaacaaca aatagaaata cttaggacca 300  
taaataccaa cgggggatgg atgggtggatg ttcaagtcaa ccatcagcaa caactttcta 360  
gacatacggg attactaagc aagggtttgt atgaagaact tgtatcgggt gacg 414

<210> 2238  
<211> 395  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-044-Q1-E1-G7  
<400> 2238

ggcgtgttgc gaagcgttgt cgttatcgtc tatggcggta tttgaaagtg atatagttgg 60  
tcctgcaatt cactttacga aaaagtataa ttcaaggagg cgctacaagg agtgcatttc 120  
gtgctttagt gcttcgggtg gtaaaccagg gtggttcttt tgacataagc cgaaaattac 180  
tcgcaacggg ctatacgact gataagggtg tgaagaccaa taatggtgct gttcgagaaa 240  
gtgactttta cgagagagtc ttttcaagaa tagcttcaaa gcgctctgac ttttggaag 300



aagtttctgt aaccttagta gtctctacca ttgacaccga gtcggataag gttatttcag 360  
 tgtggaacgc gtttggtacc aaagaccgtc agttg 395

<210> 2239  
 <211> 400  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-044-Q1-E1-G8

<400> 2239

aggatgaatcg atcctgtggt cgtcgacttt tgtgtgtctc ttgaaatggc ttccaatctt 60  
 caaacagacg gcaccaacgt tcccactttt aaaattatct tggtaagaga cggtggagtt 120  
 ggtaaaacaa cttttgtgaa ggcacatctt tctggagaat tcgaaaagaa atatattgcc 180  
 actgtaggtg tggaagtaca ccctcttaaa tttcatacca atcgaggccc tatcgttttc 240  
 aacgtgtggg aactgctgg tcaagaaaag tttggaggtt tgagggatgg ctactatatt 300  
 caaggacagg gtgctattat tatgtttgat gtcacttcta gaatcactta tgagaacggt 360  
 gccaaactggc atcgagactt ggttcgagta tgtgaaaata 400

<210> 2240  
 <211> 230  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-044-Q1-E1-G9

<400> 2240

agttacctat tccttttgtt ttgcctcctt tgattggcga ccgaacggaa cctcaciaaac 60  
 caacgggagc aagagcactt cgaggtaaga ctggacactc tcctgattcc tctctttacg 120  
 actctgtgaa aaagaatatg gatctgtctt tgatagaaca accaactgga aataactcac 180  
 gactgtaact tttgcaaata aaatatattt ggttgtgggt tgggacactg 230

<210> 2241  
 <211> 110  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-044-Q1-E1-H1

<400> 2241

aacgtgtgga tgcaactctt cctaccatca aatatatatt agaaaaagga gcaaaaagca 60  
tcgtacttct ttcccatttg ggtcgaccag aaggaaaagt ggacaaaaag 110

<210> 2242

<211> 394

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-044-Q1-E1-H11

<400> 2242

aaaaaagaca gaaaagcttt caggaggagt gaaacaagaa tatttgctgt ttttggcgcc 60  
ttttgtgtat caacgttttc tcgtgtgttt gtttacttgg aacgctctgt tgattgaatg 120  
ttttcattct aatttctttg taatcgaaac cattcgaggg tttgttacac tgactgttgg 180  
tgccccctgtt ttagctcttg ccgctagtct ttcgtttgcg cattattatc gacgcaaaaag 240  
tatgccgatt ttgcaaagg aagacacatt tttcgagtga tggaacaagg tttgcgaaaa 300  
taaagaatag ttgtgttatt cgttggaagc tttaaaaaga ataataacca aaaagaccac 360  
aacgaatagc cctttccaaa aaattgcaca acct 394

<210> 2243

<211> 351

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-044-Q1-E1-H2

<400> 2243

attacataaa acttaccaat ttggaacatc cagaaccact tgctatactt ggaaggtctt 60  
ggcgagtaac ggatattctt ggaagaaagt gtcgactaaa gcctcttcat atgtctagtc 120  
agaagaatcc aatcatttcc aaagggtcaaa gcttggaata tgaaggccaa gcagttattg 180  
actccaaaaa gggaacttta tatggaagtt ttgaagttat gaaaagccaa agtttatctt 240  
tatttgtagc gaatatggct cctttaggac ttcgaggaaa acatgtcggt tccaaagtat 300  
ccattccata atatgtattt gtgtgtaaat actggaaaca tttctcaagg t 351

<210> 2244  
<211> 313  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-044-Q1-E1-H4

<400> 2244

tgagcggatc ttacacttca gtaagaagcg tcaatgaaaa tgacgcagac gaactcttct 60  
caaaggctga gaagaaagcc aaaagtgtc aagcctctgg aatacgtagt ctacttggtt 120  
tggggggtaa cgcagccaag ttggaagaag cagcagagct ttttgtaaag gcaggaaaca 180  
cgttcaaact agccaaagct tggcagaaag ctggtgacgc ttatatgcga gcagcagaaa 240  
attatgcaca acttccagat ttaagtttcc aaaccgcaac caaatttgcc tgagccccc 300  
cttggtttaa aaa 313

<210> 2245  
<211> 340  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-044-Q1-E1-H6

<400> 2245

accacgcgt ccggtggcaa ctccgctgtc ttgaaagaca taactgcaag tattgaaaag 60  
cctgacataa aatggataac taggacgaat ctcaagtactt gtctgaattc tgcagaagga 120  
aatgttacgg ttgacttgtc gcggcagtggt agcttgaagg atatattttc attgaagctt 180  
ctcgacaata actttaagtt ggcgtgttta aatgatgcct tgtttttagt ttacaaggc 240  
ttatcctttg ttattactgg taatcgtata ttctgtagac gctcggactt gaatgaaacg 300  
gaaccattgg agtcctgctt ttcgtttatg aagatatgcc 340

<210> 2246  
<211> 316  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-044-Q1-E1-H7

<400> 2246

atttcgcgtc agggcgtggc agaaatgagt ggtagaaatg gtagcaggaa ataggcagga 60

aagagttggt gtagtggaat ataatgaatc acttgaaatt agcaaattgt caaaggctgc 120  
 ttccaagaga gcgttttagtg aggatatgta ccaggaatgt atccaaacgt tggaacaagc 180  
 aggttccaga cctgatagtc gtggagtcgt gtttacaggt gaatgtgatt tcatttgcaa 240  
 tgggtgtagac gtgaatctac tcaatgcaat gcatgtgttt caggtgataa gcaccgtagt 300  
 tgatcaattg atgaag 316

<210> 2247  
 <211> 410  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-044-Q1-E1-H8  
 <400> 2247

gcgtccacaa gtggatcatt ccacgttggt aaagatagac ttgtctcaag gcagctttaa 60  
 agtactccaa gactgtgaca aagatttaga atgtgatcat aataccaagt ttcagttgga 120  
 acttattcag tatggtctct tttcacctgg ttttggacg agagaaaatg ttctgctctt 180  
 ctatttgag ctcgtgtcag gtgtattcat aagggacact ctctaccttt tctacaacaa 240  
 aggtgaagaa catttgtttg cgagtttaat gctgttggtg gagacacaag tctcactgta 300  
 tgcagacata caaacaact gggagaaacg acactttatc gttggcctca tcgtcaggtc 360  
 tttgtgtgag gaatatcaac gacagtattc agagctatgt tcaccgaatg 410

<210> 2248  
 <211> 419  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-044-Q1-E1-H9  
 <400> 2248

accacgcatc cgcgaagata caagacaagg aaggtattcc cccagaccag caacgtttga 60  
 tttttgcagg taaacagttg gaagatggtc gtactctctc agactacaac attcaaaagg 120  
 agtctactct tcaattggtc ttacgtctga ggggtggaat gcagatattc gtaaagactc 180  
 ttactgggaa gaccatcact cttgaagtgg agccctcaga tactattgaa aatgtcaagt 240  
 cgaagatata agacaaggaa ggtattcccc cagaccagca acgtttgatt tttgcaggta 300

aacagttgga agatggctgc actctctcag actacaacat tcaaaaggag tctactcttc 360  
acttggtggt gcgtttgaga ggtggctggt agtgagttta tcctgaagtt gtttttctg 419

<210> 2249  
<211> 413  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-045-Q1-E1-A1  
  
<400> 2249

gaccacgag tcagcttgcg gttcattgtc accaaatggg ttccttggtg atggcaaccg 60  
tgggccaact ggaaggaagg atggaatcca attggtcccc ggaggtcgtc ccaaaaacgg 120  
cggaaaattc cgtggccccg ggtaccgttg aaaaagggtt tgggtgtaaag aatcccagtt 180  
ttatagggac aatcaccaac ttcagttgcc aaggggagaa tttacacgac gggatgggac 240  
cgggtggcaag agtattttac ggaacaagtt tgaggatgaa aacttcaact tggagcaatc 300  
tgagcccttt ttattgtcca aagccaattc gggaccgaat gacaacggaa agtcagtttt 360  
cattacagta gtgaagacac cttggctgga tcggaagcat gtagtgtttg gga 413

<210> 2250  
<211> 320  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-045-Q1-E1-A10  
  
<400> 2250

gaccacgcg tcagcgaacg cgtgggcgga cgctgggtg gaaattcatc gtttgctagc 60  
agaagaccgt gcaattggtg atgtcagcag tgccaatgga gcacttgaag cggaagataa 120  
tgtgaacaat agtgtttatg atcttgcagc tagtggaag cggaacgaa atgatctcga 180  
caatggttct cagtttgcac caaatgccaa gaagcatcga atagttattc ccaaactgta 240  
caaaactcat cagtggatga ttgtttcaac ttctgcgaaa actggcaatg catctcctgc 300  
tacacagtgc tataacttcgg 320

<210> 2251  
<211> 268

<212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-045-Q1-E1-A11  
 <400> 2251  
 tgccaatcta acagtattca ctggttcctt tgcagtgcta cttcttcatc gagttccaca 60  
 agcagcggtg atcaggggaag cagtttaagt tgcagtgttg ctatgcgcta tgcataatact 120  
 ttattatccc ttgctcgaaa agaaggtatt ttggagaaag tcaccaacga tgtgaagcag 180  
 tttcgcactt ttgagtcgga tcatccgat ttcaagcgct ttttacaaga tcccacagtt 240  
 ccaaaaggcg aaaagcaaca attattgc 268

<210> 2252  
 <211> 232  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-045-Q1-E1-A12  
 <400> 2252  
 cgcgtcaggg tgtatgatgc atgcaataac gtgacgcatt cgatgagcga gtctcacatg 60  
 caactatgta acgctaagcg gtgactcatc atgagtgaag tactggaaca acagtgatca 120  
 cagaagcatg ttaggtatgg gtatagtaaa acccattgca gaagtataag caggaatctg 180  
 cacaagaggg aaggcacatt ggaactgata aaccgtccag tcaagcaaat tc 232

<210> 2253  
 <211> 288  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-045-Q1-E1-A2  
 <400> 2253  
 gagatatatt ggctcgatgg ttgctgacgt ccatcgactt ttgctctatg gaggtatatt 60  
 ctgttatcca gcggataaaa agaataccaa tggcaaaactt cgtctcttat atgaaggagc 120  
 tcccatggcg ttcttaatgg aacaagcggg aggaaaggct tcgacgggaa cagaaaaatat 180  
 tctggatatt cagccgcact cgatacatca aagaactcca gtgtttatgg gcagttatga 240  
 agatgtttgt gatttagagt cttttttcaa gtctgcatct caataaag 288

<210> 2254  
 <211> 395  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-045-Q1-E1-A3  
  
 <400> 2254

gtagtttgtg tacgcggttg ggagagctag atatatttcg tcagagtttc gtagaaaata 60  
 ttttgctaga ggcggagaga tgccgtgttg aggttggtcc atcctttaat gtccttctga 120  
 acaggaaatt tagtgctaata gaagagttgt attctccaag tgcttggaata gaattctatg 180  
 acaaatatatt gtcagaagat ggaatatttt tacccaacag aaataattct gctggacctg 240  
 acattatcgt tcgagtgtct gtgcctatag atgctagttc ttccactccc aagaagagac 300  
 agtcttcttt gaccaagta tctatggata caagttccaa gaagagaaga gtctatttga 360  
 taggcatagc attgaaatgt tatggaaagt ctggt 395

<210> 2255  
 <211> 213  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-045-Q1-E1-A5  
  
 <400> 2255

agcggacgcg tgggcaagca gtcagtgttg gtttcctacc gactatatca actagtttcc 60  
 ccctaggaca aagtgaagat tggcactgtt cccacgtatc taaatacagg gttgggcagc 120  
 gttttgtcgc acgcaactgt cgtcagcttc ggcaaggaac aatcttgata atgtcaagca 180  
 caagctcttc ggacaattgg aaacagcaga tac 213

<210> 2256  
 <211> 402  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-045-Q1-E1-A6  
  
 <400> 2256

aggggtggca gtgaagcatg ggatttgcag agttcgaacg ctcttatgag aagtatacag 60

gaggtgaccc atcgagaatg aaagtgtccg tggagaaact agacgaagag caggttccac 120  
 ttcatagaag agactattgt gcacatttgt atattccttt gcgccgttgt ttgagagaca 180  
 actatTTTTT gccgtggtct tgtgaggaag agaaggaggc gtataaccgg tgccaaagaa 240  
 aagagagaag aagaagagaa cgactctata agaaaatcaa ggaagaggcc tccaaagtat 300  
 cggcgacgga agaacaagat gaataatata gtgttggtgc gtcgtctttg tgttggaaca 360  
 ataataactc ctcaaatagt aaacagcttg atttgatttt ca 402

<210> 2257  
 <211> 332  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-045-Q1-E1-A9  
 <400> 2257

aggactacaa aggaattgcc aatgcggatt ggaacataat ttacgacaag ttggaaaaaa 60  
 tcgccgctaa aggtgccaaa gttgtactta gtaagttggc catcgagat ttagctacgc 120  
 agtattttgc cgatcgagac atattttgtg ctggtagagt tccagaagaa gacatgaaac 180  
 gtgtcatgaa agccaccggt gcaagcatgc agtctacagt gaataagcta actgatgatg 240  
 ttctcggtac ttgcgcattt tgaagagaag caagttggta atgaacgtta caactttttc 300  
 actggttgtc catatgctag aacagcgaca tt 332

<210> 2258  
 <211> 284  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-045-Q1-E1-B11  
 <400> 2258

tcattggcgca atgtcttatg tcattcaaga tgaagatggt caaataaagg aagtccactc 60  
 aatatctgcg ggttttagact atccaggagt gggaccagag cacgcattct tgaaggatac 120  
 tggtcgcgct gaatatgttg cagttactga tgaagaagca attcaaggat ttaaactgct 180  
 ttctaggatg gaggggtatta tcccggccct agaaacagca cacgctgtag cctacttgga 240  
 taaattatgt ccaacgttat caggaagccc caacatagta ctgt 284



<210> 2259  
 <211> 181  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-045-Q1-E1-B12  
  
 <400> 2259

ccggttagac tctcagattc atacggtaat attgatatgt tgtcaagtat gtattcatca 60  
 tggagcaatg tcttacgtca ttcatagaagc ttattgtcaa ataaaggatg gccacgcaat 120  
 atctgggggt ttatactatc caagagttgg aacagatcaa gcattcttgg tggatactgg 180  
 t 181

<210> 2260  
 <211> 388  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-045-Q1-E1-B2  
  
 <400> 2260

agccccacgcg tccggatctc cccagctaaa caataatggt ggctttttgt tgcaaggtct 60  
 ctgcataaga aaagactaag attagtttat acaaatgaca gcaaactttg tatctttttg 120  
 ttctgngta aattttttat ctcccagtggt gttgtttgct gggaaaaggg ttgttttgca 180  
 gatgtgacct tacttgagaa ggaaccaa atccactcct cgtactagtc tgtttgttaa 240  
 gcggactggg gagaaacttg gtgaaacttt tcacttgat gttgtgcttg gtcgcctcac 300  
 agtcgaatag gctctgaacc tgggtggagct attttgagca gagagccgat agtaaagaga 360  
 cagtcccgcg ccctcatgga gaaatgct 388

<210> 2261  
 <211> 392  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-045-Q1-E1-B3  
  
 <400> 2261

agcccacgcg tccgattcat cgttgctcaa tcttggtgca gatatgacag gtcgtggtaa 60  
aagtggtaaa ggtttaagaa aaggaggtgc aaagcgcat cgcaaagtct tgcgagacaa 120  
tatccaagga ataaccaaac cagctatccg tcgtttggcg agaagaagtg gaattaaaag 180  
aatctcacga cttaactatg aagaacacg aaatgtcctt cgtgttttct tggaaagtgt 240  
tattcgtgat gcagttactt atacggagca tgctcgtcgc aagacggtaa ctgctatgga 300  
tgtcgtatat gctctgaaac gtcaaagccg ttacctttac ngatttggag gataaagcct 360  
gcttgaacaa aggggtgtttc tcaacacctt tc 392

<210> 2262  
<211> 393  
<212> DNA  
<213> Cyanidium caldarium  
<223> unsure at all n locations  
<223> Clone ID: LIB190-045-Q1-E1-B4  
<400> 2262

aggcatatgg tacagcacag atgggtgttg cgttgcttcc aatgggtgtt tgagaccgga 60  
actagttatg cgatctataa ttctgtagt aatgggtgtt gtgctaggta tctacgtct 120  
catcgttgct gttattttgg ttggacaaag tatgcggtgt cttttgagt aatagcacta 180  
ctttgactct tttgtagttg ccgaaacgaa ctatccatat tttcttggct ttgcacacct 240  
tgcttctgga ctagcaaacg gtctcagcgg tctggcggct ggaatttgta ttggtatagt 300  
tggcgacgca ngcgtccgag ctacagctca gcagccaaaa ctctttgttg gaatgattct 360  
catccttata ttcgccgagg ctcttgcctt gta 393

<210> 2263  
<211> 375  
<212> DNA  
<213> Cyanidium caldarium  
<223> unsure at all n locations  
<223> Clone ID: LIB190-045-Q1-E1-B5  
<400> 2263

caactagagt ggaaaatcan gggatttgct aaaccgggac tttgggaacg gtattttggg 60  
attggaaaac tttgaatgat tttcaaggcc tggaccccca aaaccgcca atgtcgcac 120

atagttggaa tcctaaagtg actcaagggt ctcataagaa aagcaaaaaa cctatttcta 180  
 tacgtaattg caagattcgt ccagggtattt tattatggga agaagatggt tctcgtgtgg 240  
 ttcacttggga acgattatcc ttctattctt ctacaacgaa gcgtcccatt tctttgggtc 300  
 ctgttacgag aaatagtcct cctaccgcta ttattgggtg atttacgatg caccgaggct 360  
 attctgggaa tcaag 375

<210> 2264  
 <211> 399  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-045-Q1-E1-B6  
 <400> 2264

cgtttcgtcg tcgtcgattt ttccttcgac ttgggcgcca atcttcttct tcttcttaga 60  
 atgaaattga atatcgctaa tcccgtact ggttgtcaga agcaaataga agtggacgac 120  
 gaaagaaaac ttcgtgcttt ttttgacaaa agactggcgc aagaggtccc aggagacgct 180  
 ctaggagacg aatttaaggg atatattttc aagatcatgg gtggacaaga taaggaagga 240  
 ttcgctatga aacaaggagt cttgaccact ggtcgtgtaa gactcttatt aaagaaagga 300  
 gactcgggtt gccgatggta cggtatgaga gacggtgaaa gaagacgaaa gagcgttcgc 360  
 ggttgcattg tatctccaga tatagctgtg ttgaacctc 399

<210> 2265  
 <211> 389  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-045-Q1-E1-B7  
 <400> 2265

cccttcgggg ttggttgggg caaccttgcc aacgccggaa gaacatccaa cggaagccc 60  
 caccttgatc aacaccagga caaaattaaa tccattgaag gctttgttgt ggggaaaaat 120  
 ttgtccccta tttccttcaa tataatcgtg gggttcatta tctaattgggt tggtgaaact 180  
 ggtggttggga ttctaccgt tgcagactat cgcgtattga cttcattgga aaaagaccaa 240  
 ctgggaaagg aagctcagtt gcatcaggat agtgccctgag aagaagcaat gttggttggt 300

tgttgatgtg ttggtggtgg attgtgtata tatatagaga gagtgtgtgt gagagaaaat 360  
gcttgctttg tgagtgaacca ctctcaaa 389

<210> 2266  
<211> 271  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> unsure at all n locations  
<223> Clone ID: LIB190-045-Q1-E1-B9

<400> 2266  
  
gaccacgccg taagccaagc ctccgggttg taatccaagc cagggcaata tggaaacatc 60  
caaactctggt tacaagacca gaagatttga gaatattctg tcagagggtga gtattggcaa 120  
ctagtgtttg ggagtangca tagatgaata tgtctctctt ttttgttagg tcaaagaatt 180  
ttatgaaatt caccgtcaac tccattccta tccgggtgga attcatttgg aaatgactgg 240  
acagaatgtc actggtaagt aataacttgt g 271

<210> 2267  
<211> 396  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-045-Q1-E1-C1

<400> 2267  
  
acgggaattt ggtgttttca atatctcggg aggtttcagg gtagttattc aatcattgag 60  
ttcctctata ttcaacgtca atacgtattg atcagaaggg aagaagagca tgtactgatg 120  
gtgttctacc aactggacg ggggcattga tctcaaagaa gggcaaccac tcattagaat 180  
gctgcaaagt tcctgccata gagcattgtt tgatttcgag gtttcttggc atcatagtca 240  
taaaatttcg tcgaagtcca tcgcacagtg caagggtatc ctttaagtga atttaaggct 300  
atttttattg cgacacggtc caagaaatca tagtgagacc tcccagagta aaacggagtt 360  
aaattatcca aggtaccga attcgtaaaa agacaa 396

<210> 2268  
<211> 327  
<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-045-Q1-E1-C10

<400> 2268

gaccacgcg tcagcgaacg cgtgggcgga cgcgtgggac gacgcgtggg atgtggcgac 60  
cttccaaatg ttccaacgaa gtttctcttg gctttacctt tttctttgcc acttgcgctt 120  
cccaaacaag tccgtttctc tgtaaaaagc agagtaaata ggaaacatgt cgtttgtact 180  
gtcgaatctg ttgggtccat ctatcaagct tcggatgtac gtaattccaa gacttcagaa 240  
tggaaggctt tagaacaaca cgcaaagaac gttaactcaa agactcactt gagagatcta 300  
ataactgacc cacaaagatt cgaaaag 327

<210> 2269

<211> 301

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-045-Q1-E1-C11

<400> 2269

gaccacgcgt cagagtatga cgatgggtat tgaaagttcc aattcttcct caatcgagat 60  
tgactcggaa gaactagaag gacattactg atatcgtcta atgcaattgc tagagaacgg 120  
tcctgggatg agagcaggac tgagagtgtc tgaagacttt attattgctg tggatggctt 180  
gactgtcgag gaagacgaag ataagatatc tgagtattta atgaagaaaa caccacaata 240  
tgtcaagcta gtgggtttgga actgtctgga tgaagatgaa agagacgttt ccttggttgg 300  
c 301

<210> 2270

<211> 405

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-045-Q1-E1-C3

<400> 2270

cccggcctac ggtgttagaa tggtctagtg aacaactctc catcttacga cctggagcag 60  
ttacagcaga agaaattgaa gcagttattc atatgcctgt ttccgtattt tcgtcatcag 120

ccactaggaa taggaacgat gtccaagtac ctcgagcacc agggatgaag tatcgacatt 180  
atgcacaaaa agcaccgctt gacttggtga aaggagatgt ggaacaatta agtaaaaaag 240  
tatgcgaatg gaagcaacaa ggaaagaagg ttggtttgtt ggcagtaaga gaatttggtg 300  
cacagataac atctgcagat gtgttcagag catgtggtga aaataactgt ttgtcaagtt 360  
atgccccgaga actgtataaa gctttgagag cattcgatga cagtc 405

<210> 2271  
<211> 376  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-045-Q1-E1-C9  
<400> 2271

gaccacgcg tcagcccacg cgtccggttg caaacgacgc atggaggacg atcatcgaat 60  
atgaaagcac tacaacaact tgttgcgttt caacacgata gctttttatc tcatcacaaa 120  
atgaatatat tttatatgcc ctcttcttct cattggaaaa agtcctcact caagtgggtct 180  
tttctagaa tggcggcatc tcgtccttta tcttgtcatc aagtatttga aataaccccc 240  
gacaaacctg cagttgttgt cgaccaactt tgtgaatcat tcaaaataga aaagagtcgt 300  
gatagtaagc aaccttcccc tggtggaatcc gtgaaacaag tttccattgt tgccaaacaa 360  
cgcgaagttt ttgggt 376

<210> 2272  
<211> 76  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-045-Q1-E1-D10  
<400> 2272

cccacgcgtc agcccacgcg tccgcccacg cgtccgccca cacgtcagct gattcggttg 60  
cagatgcgtg atgttg 76

<210> 2273  
<211> 186  
<212> DNA  
<213> Cyanidium caldarium

<223> Clone ID: LIB190-045-Q1-E1-D12

<400> 2273

ccggccgacc aagccgtcag ctacggacaa aaaaatgggc cttagtcgcc ccggccctgt 60  
tggttcaacg ggcccttttt gggaatcaaa ggcctgggga ccttttgcca ctgacccccg 120  
aaattgaaag aatgccaccc atgccaaca atccgggaat ggacaaagtc caaggatttc 180  
cggaac 186

<210> 2274

<211> 360

<212> DNA

<213> *Cyanidium caldarium*

<223> unsure at all n locations

<223> Clone ID: LIB190-045-Q1-E1-D3

<400> 2274

agcccatatc aacgagtttt cttgaggaag tagtggttcc tccggagtca tcagaagctt 60  
tctcacgttt gcagagagat ttagctatgg aacgaagaga gagtttgcca cgtttggaag 120  
atcagaagaa gacgcccacaa caaggacgtc ctacttgccg acctgatgaa ggtgtcggag 180  
tcttctccaa cgcttcggac tttggtacga gcaaaataaa gtgtgtggaa tattggggtc 240  
gtcaaagtcg catgttccaa gagtagaacg tgcgtnttgt gtctgttttg tgggtgaaca 300  
acatttgttc ttgtctgaaa tagaataaca gctatgctac aactaagana actggtanac 360

<210> 2275

<211> 396

<212> DNA

<213> *Cyanidium caldarium*

<223> Clone ID: LIB190-045-Q1-E1-E1

<400> 2275

agcccacgcy tccgctttgt gctgcatagt gaaccctgtt attggtgaaa ttacaagtt 60  
gattatagag gcaatagaaa agtatactca actacctcca cgtgcttatt tcttcgtccg 120  
atatagtatt gaagttgaat ctgttctttt ggggtgtttg gaaagacttg cagaagagta 180  
tttggatca cctcaagcga gaatagacgc agcaaaggtt tattgggcat cgttgaatgt 240  
tgtttataga tattttgccc agttgtatga acgttccata cactttcctc ccatgagaaa 300

gccttcttct atgcaatatt tgaacactcg agtgtatagg ccactttcac acgagattgt 360  
 atacgaagct gatgagttga cggatcattc tatctc 396

<210> 2276  
 <211> 227  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-045-Q1-E1-E11

<400> 2276

catggactcg agtacattcc tccaagacaa caaagacaag catctattca ctcttccgac 60  
 aatgaatgga agacacctaa gtggcagcgg tggcgccaaa gtacttgctg tctcatggca 120  
 cttggttaagc ggcacgttgc agatgttttc catcgatcatg aatggaagcc gctgtgttgg 180  
 ggaatcttac ctattttgtg gtagctcatt atttatgaaa tctccgc 227

<210> 2277  
 <211> 228  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-045-Q1-E1-E12

<400> 2277

cacgccgtca gggaaaatac gggaaacaat aaaaaaaaaa gaaaaaagga aaaacttaat 60  
 tacaaggaaa aaacaaggaa taaaataaga aaaaaagatt aaaggaatta gaattagaaa 120  
 aagaataaag ttaattaaaa caaggaaatt attgaaaaaa aaaattttta accccttacc 180  
 ttttgcaaaa gttccaacca attgaaaaag gaagcaaaat gaaagaaa 228

<210> 2278  
 <211> 399  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-045-Q1-E1-E3

<400> 2278

agccaaagga ctggttgat aaggaatatt tagaacagct acagagttgg atgaagaacg 60



gaagtactgt cgtggtagct gccatagacg atactccttg cattgcattt cgcgtcgatg 120  
atgagttgag accggaagcc aaacaagttg tttcgttttt tagagaaaag cacaaaatgg 180  
agtgttggtt agtaaccggt gataacgata gactgcatt tgcagtagcc agagcagtag 240  
ggattccgat ggagaagggtg gtttctcaag cgttgctgn ggataaagtt aaagttgtag 300  
aaagtttatt gcagaaatat caaagtgcaa caggaaaggc caagtctcga gtcgtatttg 360  
ttggagatgg agtgaacgat ggtcctgcat tagctgcag 399

<210> 2279  
<211> 404  
<212> DNA  
<213> Cyanidium caldarium  
<223> unsure at all n locations  
<223> Clone ID: LIB190-045-Q1-E1-E5  
<400> 2279

agcccacgcg tccgtataaa acggccgatg gaaggttaat aaccggttcc aaggaaaaaa 60  
ggtgtttaag gttgggggtt ttggtatgcc aatggggata atatggtggg aaaccgtggc 120  
caatgttggt gaaaattgca ccgccaaggt taccctcggtg aagttgggac aaggacaagt 180  
ggcaatgtcc aatttctatt tcgactttgg gaagtaatgt aggagactca atagttcatt 240  
tcgtgttgca taatatcacc agtgttggtt catcttccag tgcactgaga aggtttgcca 300  
accatttang agtagtatcc accgaatatt gtgtttatgg gtttgaagga aatccagtgt 360  
tcaacgatgg actgaaaaag ttggaacagt tattgcaagg atat 404

<210> 2280  
<211> 294  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-045-Q1-E1-E7  
<400> 2280

agcccacgcg tccggaatga agcatgcatc atactgcccc aatacattat agagtaagac 60  
atgcaaatca tgatatttca tcggatatct aatcagggtct acaaaagtgg caatatctat 120  
gggcatagaa aaatgtacga tagtgggtaca gtaaaagtta taccggaagt aaaaacctga 180  
atctgataag acgaaaacta cattgggact gataaaagggt ccagacttga gaagtcaaca 240

atgtggacaa tttggcaatg tatagggaaa tatcacccaa taatgaagac taga 294

<210> 2281  
 <211> 413  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-045-Q1-E1-E9  
 <400> 2281

accacgcgtc agggatcgtt ttgtacttga aaacagagac actgtcagtg cgttgaagcc 60  
 gataaagggtg taagtcaaag tcaacagttg cacttgcaga gacactttca ttgtgttgct 120  
 ctcatggaat aactttgacg aaagagaaga ccgattattc tcattcgttg aggattttgg 180  
 ttgtacagct tccttacagc gaacttgagt ttccaggttc ttctcttgaa gtgcctgatt 240  
 cacaagacga tgtagcttat ctgtttcctc ttgtaatcta tggaatctct tttttgtctg 300  
 taagaactca tcagcaacaa aaccgtacat ttctgcagta gttgggttct ctagaatctg 360  
 cgttgtaatt agcgcttgaa gtccagataa aaaactctaa atgcctacgt ttc 413

<210> 2282  
 <211> 272  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-045-Q1-E1-F1  
 <400> 2282

agaaaagaac taagattcat gtaagggaaa caagaaggaa caacttgcgt ttaatcccca 60  
 tgggaaggac ctccaactta gaactaccct tgggaagttt ggcaccagat ttttgtttac 120  
 tggaacccaa gacaaactcg tatgtgtctt tgctggagtt aatattcaac atggcaaaag 180  
 gcttcttgta gatttcatgt gcaaccattg cccttttgta aacatgtgtc tcaaaatatg 240  
 ggccaaatgg gtatagatct taaaagtata aa 272

<210> 2283  
 <211> 315  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-045-Q1-E1-F11

<400> 2283

accacgctc agctagaaca tcagggttgaa atgcctgaag aacgttccaa gagaaacaat 60  
ggttgacac aaaaaggaca gcgtcaacaa caacagcacg atatttgaac taaccttttt 120  
attgagtgga accacaaaga accatcgcaa ctaaattgact gttgcaatat gtaacgaata 180  
accgatgcag tattcacgga attgcaaatt aagaagcaaa tagaatgaca tagaaataac 240  
caagtaagac ccgaagctag ctgatcataa gctgtcccag cgaagtaagg ctgaaccaat 300  
aactgttgaa aaaga 315

<210> 2284

<211> 154

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-045-Q1-E1-F12

<400> 2284

tttggttgct aactgttggt gtccaaccat gaatatggca acaattcaac aatccaacaa 60  
tcatattaag gggccaaggt ttaactaaaa agtataataa atataacaaa ttaagggtta 120  
ataaaacaac tcgaaaaaaaa taatttttgt ggtg 154

<210> 2285

<211> 385

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-045-Q1-E1-F3

<400> 2285

agcggacgcg tgggcttttt cggcgatttc cgctgtacat gatgtcataa tgttaggcta 60  
taaaatgatt gtagcgagg gtttatttgc agcttgtttg ttgggactaa cttgggttata 120  
tagaaccacg tgttgtagac ttgacaaga tccactctaa tagttttctg ttcctgtaag 180  
tgttctaaaa attatggatt tcttcgctgt catgcgttcc agaaagggtt tctgtcacct 240  
ccatttgtag tgtatacatg cgacattgct tgttccacct ggttttttga cactataaag 300  
caattaaaaa tgttccactc caaaaaaaaa ggcttgaagt tgattttgaa taaaaagcgt 360  
tttaaacttt gtgtcaatag acaaa 385

<210> 2286  
 <211> 108  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-045-Q1-E1-F7

<400> 2286 -

ccagaatatg atgtcataat gttacgctat aaagagaatg taaccaaggg tttatttgca 60  
 acttgtttgt tgggactaac ttggttatat agaaccacgt gttgtaga 108

<210> 2287  
 <211> 311  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-045-Q1-E1-F9

<400> 2287

gacccacgcg tcagaggatc tgaatatttg tattttgggt tgcaactcca acgtcacaca 60  
 tcaactgagt ggctcggaat atcctttaag aaagcaacaa tgcaaggacg ctgtaaccgt 120  
 tttgcaatcc atcgacccaa agataacgaa ctttaagagat gcgactatgg aacagttaaa 180  
 tcaagtgaaa tacaaaatga gcgaccttgc ttatcgacgt gcacgtcatg tgatttcaga 240  
 aaatgactgc acttgtcaat caaccaaag cctaccaaaag aatcaataat acactggtag 300  
 caaactcaat a 311

<210> 2288  
 <211> 309  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-045-Q1-E1-G10

<400> 2288

gcgtcggttc tgttaagtta cggcaaaagg tggtgacaca aaagcaaaca gtaaacagat 60  
 aacaagaatt tttgcttgct caaaagaaac aagcataacc atgcgtgggt gggttggtaca 120  
 agaacgcggt tgagcttaaa ctgttaaccc ttgttcttct gactgtataa agagtcttat 180  
 tcttcgtagc tcagtcacaa gccgagtttt cctgtcacct aaaaattaga cattctcagc 240

tgtccttgtc cttttttgaa agtgaatata agaatacacc gaggaacttt tacacgccac 300  
aagaacgac 309

<210> 2289  
<211> 247  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-045-Q1-E1-G12  
  
<400> 2289

gatattgatg atcaatgggt aataaccaga ataagaaatc ctcccaactt ggtgaaaggg 60  
tttccaacca caattaaaac tccttgggggt aaaatccaac cttggggaag gaaaaattcg 120  
gcaactttgg acggaaatcc aacttaattc aaaaccctt tcaagaattt ggtgaacatt 180  
taacggcaag gttccaaccc aaagctttcc ttcattggta aactggagaa ggaatggaca 240  
aaatgga 247

<210> 2290  
<211> 399  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> unsure at all n locations  
<223> Clone ID: LIB190-045-Q1-E1-G3  
  
<400> 2290

aggttggagt atgagtggga agataccaac ggaggacgta ccagaccacc cgtttcttan 60  
gagaaatggt tactggacgc cttggccacg cttggctaaa ctcatccta acgaaagggt 120  
tcgagttatt ggaggcggtc tgactataat ggcgttaagt ggtgtgatat tctacactga 180  
actgcaattc cggagaccgc tgccgaccct gactccggag tggattgaag cagagcgctc 240  
caaagagttt gcaaaggagc gagagtcggg cccgccagtg gagcttgatc ctatcttgca 300  
caggcgtggc tatcaccact agatagttcg attatttcag tgatttggtg gcagaacagt 360  
tgttgaggtt tgtgtgataa aataaaatgc ccaaagatg 399

<210> 2291  
<211> 399  
<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-045-Q1-E1-G5

<400> 2291

agcccacgcg tccgggtccga cataacaacg tagttccgaa cggtcacttt cataaggact 60  
ggcaaagaag agtgaaaaca tggttcaatc aacccatgag aaagaagaga agaagattag 120  
ctcgtcagaa aaaggcagca cgtttggctc ctcgtcctgc caaagggtcca ttaagacctg 180  
ttgttcactg tcctacagtg aaatataata caagagttag actgggaaga ggttttactt 240  
tggaagaatt aaagcaagcc aaaataaacc cacgattcgc gcgaaccatc ggtattagcg 300  
tggacccgag acgaaagaat cgttcggtag agtctttgga gactaacgta caacgattga 360  
aggagtacat gtctcgactt gtgttggtcc caagaagac 399

<210> 2292

<211> 400

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-045-Q1-E1-G7

<400> 2292

agaacagcaa caatgttgaa taacttagtg tgagcgactc agtccatata aagaatcgta 60  
agttttgtag agagtataaa ctgttctttc ttcgcatat tgtccaggca gtatgaacga 120  
ttcccgagaa ttgcagagaa ggtatactgg tcttatgtcg acatctacac gtaaacttcc 180  
ctgtcctcaa gggacgagct tttatgtgag aagctaactc ctgttcggtt ggatctatgc 240  
taattgaaag agatcagaac acagtctgaa tcgtggaact cgaacaggac cactcgcttt 300  
gtacggaaca cacggaaata gtttgtaa atgcttagca ctttgaagaa aactttctcag 360  
tggcagacgc agtattcaat gttcccggtg tagtgaattc 400

<210> 2293

<211> 405

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-045-Q1-E1-G9

<400> 2293

accacgcgtc agcgagtcga tcaactggttt tggatgaagtg ttcttcgttt catgtgaaac 60  
 tttttgttat caaattcatc taatcacctc tttgggttgc aagtggatgt gttatcggta 120  
 cttgtttgtt tgagaagcat aactggtttg tttcgtcatg acacaatttt cgtgtgaaag 180  
 ctttcctttg tagatcctgc tttacgattt ttcacctgtt cacttttttg tattcagtat 240  
 cctcatcacc agaatacata cttaaagttt tggacgagtt taacatctct aacaattctc 300  
 cgtatcctac cgcaactcat gggaacaatt gcagcatgta aatgaagagt tgtagacttt 360  
 aatcaatctc caagcaggaa ttggtagccc cttaaagact gggcc 405

<210> 2294  
 <211> 397  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-045-Q1-E1-H1  
 <400> 2294

aggaattccc caaaaggaaa tggatccaatt gaaaaccctt ttgaatgaaa ccacaaattc 60  
 tcccttaatt ggccccaacg gccaaaggctt tttgaagcct aatgagtgtg aaattgggtat 120  
 tatgccgggt tatattcatt caccgggttg tattggagtt gtttcacgtt cgggcacgct 180  
 tacatatgaa gctgtggatc agacgacgag acatcaactt ggtcagagca ttgttatcgg 240  
 aataagtggg gatccttttc atggaacatc ctttatggac tgttttgata tgtttttgaa 300  
 cgatccgcaa acgaagggca tcgttatgat tggcgagata ngtggtactg aagaggaaga 360  
 aactgcggaa ctgctgaaga attcatccat aaagaaa 397

<210> 2295  
 <211> 92  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> unsure at all n locations  
 <223> Clone ID: LIB190-045-Q1-E1-H10  
 <400> 2295

agaagattgc ttcattcagat ccgcggtgga ggcacgaana cacaagttga gaaagcttgt 60  
 accgagtcct aaactcgttt ttcattggac tc 92

<210> 2296  
 <211> 137  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-045-Q1-E1-H12  
  
 <400> 2296  
  
 gcccgggccc aaccacaag gcaaagtggg ccaaggaagg ggaaaaagaa ggcagtaatc 60  
 aaagacggga aaagaaaaag gcaacggccg ctttttccta aaaaacaaag ccaattttcc 120  
 aagtggcaaa attttgg 137

<210> 2297  
 <211> 366  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-045-Q1-E1-H3  
  
 <400> 2297  
  
 agcccacgcg tccgggcatg ttgccccttt ggctccgggt aaccaatta cagaaacctt 60  
 ttgaccaacc aaaaacggtc caatttgaaa aaatttatat atagtgtgat attttgaaga 120  
 cttgtaatct attggtgcgt ttctttcgca actagtgcaa aaggaagcaa gcgctatcta 180  
 gtgtcggtcg tattcagttg gtttataagc ttttggctctt ttcttccgtt gcaaattggt 240  
 gatacttttt gatatgacta gagataaaga ttgggaggtt atgacaagta tcttggacaa 300  
 agacgatcta ttcggtattc tgacaagatt agacttgggt caactcaaga aatctattgt 360  
 caaaca 366

<210> 2298  
 <211> 410  
 <212> DNA  
 <213> Cyanidium caldarium  
  
 <223> Clone ID: LIB190-046-Q1-E1-A1  
  
 <400> 2298  
  
 ttcccgggct caccaccct tcaagacaag gaccctcgg aattcatata aataaactat 60  
 ttctgcacaa aaagaatagt taaggatcta ggccacaaat taacagggtta cgggtatgtg 120



cataaccggt caagtgcgaa ttcgaggctt tagggctatc cttattttgg ctatagcttg 180  
gttctcgctc cacatcaaaa ttccaaacga tagtaaaaac acatagtttg gcatccgctt 240  
gaatctttca ataccctat catatcattg taatgaacga ttttgagttg ttttactggg 300  
gtggaaaatc agaaggaaca atggtttcta cgacagaaga atatcgcatg gatcaactac 360  
aatgaacat gattgggaac tcttttgaaa cgctatgaca taggatatac 410

<210> 2299  
<211> 426  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-046-Q1-E1-A3  
<400> 2299

gaccacacg tcaacagtca ggacagtcgt ccgcagtgaa cgacttgaaa agagcagtta 60  
cgaaagctag tttggatagt gaaacaagac gacgaatgaa ggatttaaag aaaataatag 120  
acgcaacgta tttacaaccg tcacctcgca actccaagtg tgggcctcac aaagttctaa 180  
agtatattca gcagcgtctc cgtgcgaaag agtggccggt tgtcctgaaa gctttgctgt 240  
tatgtcatat cttactggac gaacgcagta caggaatggt ggatcttttg catcacacgc 300  
cttttatcat taacctgcaa gagtttcgtg atgcttcaa cccagtgct tttgattatt 360  
cctcatatac aaggctgttt gctcgctatc tccaagaacg aattgttact atacgaactt 420  
tgggtg 426

<210> 2300  
<211> 430  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-046-Q1-E1-A4  
<400> 2300

aacgaaaagc aactcctttc caacccttg aaaagaaaga aataccaagg tttttggtat 60  
atattgcttt tgttgacgtt attattatac gcaacttggt ttgtagcttg ttctgtttc 120  
aatgccttct ttcggtagat gggttatggtt ttcgagagga atagactttt cttcatgggt 180  
tgtaggagac tggggaagag aatgacatca tcatcagaag aaagtagcca acgctatggc 240

tgtagtcgct cgacagacca atcctcgctt tattatcagt acaggggata acttttatga 300  
 ctatggagtg tcttcagcaa gagacaagca gtggaatagt tctttcgaaa gcatatatga 360  
 tagttggttg aagaatattc cttggtacgc tgtcttagga aatcatgacc atttggtttg 420  
 actgcacaag 430

<210> 2301  
 <211> 410  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-046-Q1-E1-A5  
 <400> 2301

cacacgtcag caatgaggag ggtggtgtgg ttgcgggagt gtggtctttt tgtaagaata 60  
 aagtcacgt aaagttgctc taagaatact gataaatgtc acgcaaccaa caagttgttg 120  
 ggtatgggag cacggataaa acaagcccgc aagtgatgtg tactgaaaac agtggcgctg 180  
 ttgctggctc cttgcgtggc gcccaaccacg aagacgaagc tttggtggaa gcctggattc 240  
 gaaaagcttt ttctttgttc gaccaagacg gaaaaagtta tgtggatagt gtaaactttg 300  
 cagacgatat ccagcacttg tttcccaact gttaggaaga agaagtcgaa gagttgctgg 360  
 aagacacgga cccaacggt gttggagttg tcacttttga caacttttgt 410

<210> 2302  
 <211> 401  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-046-Q1-E1-A8  
 <400> 2302

gcttctgtta tggaacttgt ggaagacgag tatgttgcaa tcgcgttatt gctacttttt 60  
 gagcataaca aaggagactc atctttcttt aaaccatatt tggacatatt accctctctc 120  
 gacgaaatca accccttggt ttggtggtca gatgaagatt tactgctgtt acaaggcagt 180  
 ccaactttat ctgcttggtc gcaactgaga gaaaaacttg tgagagagta tacatatcta 240  
 gagaaccata ttattccaca aatcccgaac ctggcccgtg tagactttag acaatttcag 300  
 tgggcatttg gtattctttt ttctagagct atttgttttc ctagtacgaa gagaattgca 360

ttggtacctt atgcagatct gctcaatcat agtccttttt g

401

<210> 2303

<211> 246

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-046-Q1-E1-A9

<400> 2303

cccacacgtc acgcccacgc gtccgcggga cgcattggagg gtcgcaagga tgccactgga 60

cctgagactt gtccgatgat ggaagacgtc atgctgccga acaccatatg ccgcagttga 120

agaatacagt ttatcgtatg ggagtgaccg atgatgagat tactgtattg agtgggtgcac 180

atactttggg gcaatgtcac agtgaccgtt cacgttatga aggtccatgg acacatcaac 240

ctttgc 246

<210> 2304

<211> 222

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-046-Q1-E1-B12

<400> 2304

tcgaccacag agtcagctct agactctgaa attcgcattt ttccaagtaa agccctgtcc 60

atgacaaaaa aaaaaaaaaa aaaaaaaaaa gagaaaaaca aaaaagatca taaataaaaa 120

aaaggggtgga tgcacaatgg ggtgcaagtc ttatttccgc gtgcatgaga gtcattact 180

cttcaatttt gtcacctagt ttcagttcgt caggcagtcg tt 222

<210> 2305

<211> 170

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-046-Q1-E1-B2

<400> 2305

aatTTTTTTTT cctttggcga tgggggtcctc ctccttaaaa ccttttccaa aagttataag 60

ttaccccaaa atttgaatt tgggctttgg ttggccttgg aaactttgat taaaaacaag 120



<211> 355  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-046-Q1-E1-B5

<400> 2308

ccgggccgac ccacacgtca gatttatatt tactacttgg tgtggacact gtctagacta 60  
 tattcctgaa tatatgcaac ttgcagagaa actagcgcac gtacaagact tgactttttgc 120  
 agcaatacaa ccacgtgata tgccacctat agctagaagt ttagatgttc gttctttttcc 180  
 agtatatttat ttgtttttac gcggaacaaa agacaagcct attcgatggt tggcggaaga 240  
 tcgaaagcat cttgaagcgt ggatcgacac atatcgagag aagaatgcac aaggcatcga 300  
 ttctctgtat tcaaaatagt caagtttatg tatatcagaa taaacaacct tatgg 355

<210> 2309  
 <211> 401  
 <212> DNA  
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-046-Q1-E1-B9

<400> 2309

gaccacacg tccgcccacg cgctccgcca cgcgtccgcc cacggtccg cccacgcgtc 60  
 cggatctaag gaagtttagca accaacttga ttccatttcc acgtctacac ttcttcatga 120  
 ttggattcgc acctttgagt tcaccaggct ctcaacaata ccgttctgct agtgtttctg 180  
 agctgactca acaaagtgtt gatgcgaaga acatgatggc agcatgtgac cctcgtcacg 240  
 gtcgttattt aacagctgct gcgtatttcc gtggaaatat gtccacgcaa gatattgatg 300  
 atcaaagtgt taatatccag aacaagaatt cttctactt tgtagaatgg attccaaaca 360  
 acattaagag ctctttgggt gagattccac ctttgggtat g 401

<210> 2310  
 <211> 422  
 <212> DNA  
 <213> Cyanidium caldarium

<223> unsure at all n locations  
 <223> Clone ID: LIB190-046-Q1-E1-C1

<400> 2310

acgaaatgaa tttattaccg cacaagagtt ggaatatttg gagtaccaag aatatagctc 60  
gaattgaaag ggatgaacaa gcttttgaaa aagagcaaag agaagcgcaa aggcaagaaa 120  
ttcaacgaca aagggatgag aggttggaag agttgcgcaa taaagtacac gcaagacaag 180  
aagaaagaaa gcaaggagat gagcaacggt gtttgtcagg ggaaaagaac gaggaaccag 240  
ctcggagtgt gaatacaacg ataaagacga ctttgaaaga aagtttaaag gttccttggt 300  
attcgggtact cgataaagtg gaaaacaaaa cctcaaccat cggagacaag agaggaagac 360  
ccgattgtca aaatacgaga gtgggagaaa caacanaacg ttatacaca ggaagaaaag 420  
cc 422

<210> 2311  
<211> 351  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-046-Q1-E1-C10  
<400> 2311

gaccacacg tcagcggacg cgtgggtttt ttttgaacac ctataccaac ctactattac 60  
tattattacg caagaaatgc ataacaggaa aatgtcgaga gaagcgtata aaagagtagc 120  
tcttccgcag aaaaatctga tgcggttcga ggggtatttc gcacgtacta ctattatgag 180  
actcctacat attattacta ttatgagact ccgacataat attactatta tgagactcca 240  
tccgcaattc cgaatataaa tccttattgt acctataccc aaatgtgtca gagtatatgc 300  
acgacttgtc caactccata ttaatagtcg tatgatgggt aagatcatat g 351

<210> 2312  
<211> 369  
<212> DNA  
<213> Cyanidium caldarium  
<223> Clone ID: LIB190-046-Q1-E1-C11  
<400> 2312

cggctcgacc cacaacgtca ggtatcgcca aactatatgg acgaactgga agaggtaatg 60  
ttacagggga tttccatcag aagttggaca tcaattccaa cgatagcttc acggtccaca 120  
tcgaaagtaa tcaacacgtt gctgtcatgg taaccgaaga agacgaatca ccaactatag 180

tgggtgtgaca caatagaaga agatatggca tcgcatttga ttcacttgac aggtcaacca 240  
 atagcgactc caatgtcacc atcagaagta cttttggtaa cttccgaatg ccatacggtg 300  
 acaacataca gactaccgat gaaccttgca gaccaaatat gcaacctgca acaaatatgg 360  
 tagctgcac 369

<210> 2313  
 <211> 431  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-046-Q1-E1-C4  
 <400> 2313

aaagaaaatg gcaaatactc gtctcaactt ttctgtcgga aacaactcgt tactggagtt 60  
 tgccaaggggt atttaaaata ttcctcatcg agaactgcag aaactagatt atataggaca 120  
 acgactttct agtagtggtg ctttacaatt ttggaagcca aagtgcgatt caaaccagtt 180  
 ttgttcttta agctctcttt ggtcgaatga acaagacatt tctagtagaa acaccgacat 240  
 gagagtatgt attgaaagag gatatttagt ggagttgatg ggtgagggat tgtctgtttg 300  
 tatgcgttgg attatctcgg aatatattca ctacttgag gagactccac aatcctattc 360  
 gtttctcgt attatttata tcgatacttg tgcaagtcta agtattatga aatggaacga 420  
 ctatttcaaa c 431

<210> 2314  
 <211> 422  
 <212> DNA  
 <213> Cyanidium caldarium  
 <223> Clone ID: LIB190-046-Q1-E1-C5  
 <400> 2314

agcccacgcg tccgatgcgt tggtcgtttc tggttgctcg agtcgcccac tggtttgcca 60  
 atgaagttgt cgtgaagaaa cttgcaaata gtgaagcctt tcagaggttt gcagtacgct 120  
 cgtctcagtc tatagaacag ttgatacgaa agggatgaaca aagggttggtt caaaccaggg 180  
 gtaaagaagg tttgacaggt ttggtaagta cttgggggggt ttgaaaggct cgtagttttac 240  
 atgcagcaat agagttcaga gatagttatt caaagaatag cagaaaaatt ggcaaattta 300

aaaaaaagct aaagtcccag agcttttcgg aggctttgaa agaagaaatg aagcgaacta 360  
tgaagaaata gtaggaaggc ttagaaatag taggaaggat aagaaatagt ttgtataaaa 420  
ag 422

<210> 2315  
<211> 424  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-046-Q1-E1-C8  
  
<400> 2315

accacgcgt ccgcccacgc gtccgagcca aagtatccga taaaatacaa ctcatccaga 60  
atttattaca aaaagtggat gaaatgggta tcggaagtgg catgtgttat acttttcttc 120  
gagtattata ttccatgccg attggagact ccatttatga tgagcctgga tcacatttgg 180  
tagaaaatat tatgaaagaa gccaaagaaa gaaatgtaaa gatacatttt ccagtagatt 240  
ttgtagtagc cgatcgcatg gctcccgatg cacatacaga gatacgtacc agagaacaag 300  
gtattcctga gcatatgcaa ggactggatt gtggaccaca aagtattcaa caatttattc 360  
aagtagtgca acattgtaat acaatagtgt ggaatggacc tttgggtgtg tttgacatgg 420  
atat 424

<210> 2316  
<211> 407  
<212> DNA  
<213> Cyanidium caldarium  
  
<223> Clone ID: LIB190-046-Q1-E1-D11  
  
<400> 2316

gaccacaag tcagcctatt ctggcatgcc tgacatccaa gggtttattt taagaggaag 60  
attggttagga ttgggagaaa catggctagc caaatgccag taaccacgat gataatcatt 120  
ggttggcatc cgagagcaac aagacttttg ttgcacgata tcagccacag tttggtaccg 180  
attagttgct catcaattag taggtccaat caccatgaga ttgtctaata ttggaggctc 240  
atgcctctgg gcattttcaa ggaatattat gatactgact atcaagaatt cctaattggtc 300  
acgttgacac agctatcaat atcacatttg tagagttacg aactcaagat tggcaatata 360